

**Appendix F**  
**Wildlife Observed at the Whisper Creek 1 Site**

<u>Common Name</u>	<u>Scientific Name</u>
<b>Amphibians and Reptiles</b>	
Pacific chorus frog	<i>Pseudacris regilla</i>
Western fence lizard	<i>Sceloporus occidentalis</i>
<b>Birds</b>	
Acorn woodpecker	<i>Melanerpes formicivorus</i>
American Crow	<i>Corvus brachyrhynchos</i>
American goldfinch	<i>Carduelis tristis</i>
American robin	<i>Turdus migratorius</i>
Anna's hummingbird	<i>Calypte anna</i>
Bewick's wren	<i>Thryomanes bewickii</i>
Black phoebe	<i>Sayornis nigricans</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Bullock's oriole	<i>Icterus bullockii</i>
Bushtit	<i>Psaltiriparus minimus</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Downy woodpecker	<i>Picoides pubescens</i>
European Starling	<i>Sturnus vulgaris</i>
Golden-crowned sparrow	<i>Zonotrichia atricapilla</i>
House finch	<i>Carpodacus mexicanus</i>
House sparrow	<i>Passer domesticus</i>
House Wren	<i>Troglodytes aedon</i>
Killdeer	<i>Charadrius vociferous</i>
Lesser goldfinch	<i>Carduelis psaltria</i>
Lincoln's sparrow	<i>Melospiza lincolnii</i>
Mourning dove	<i>Zenaida macroura</i>
Northern flicker	<i>Colaptes auratus</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Nuttall's woodpecker	<i>Picoides nuttallii</i>
Oak titmouse	<i>Baeolophus inornatus</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Ring-necked pheasant	<i>Phasianus colchicus</i>
Rock dove	<i>Columba livia</i>

Ruby-crowned kinglet  
Song sparrow  
Spotted towhee  
Turkey vulture  
Western kingbird  
Western meadowlark  
Western scrub-jay  
White-crowned sparrow  
Yellow-billed magpie  
Yellow-rumped warbler

*Regulus calendula*  
*Melospiza melodia*  
*Pipilo maculatus*  
*Cathartes aura*  
*Tyrannus verticalis*  
*Sturnella neglecta*  
*Aphelocoma californica*  
*Zonotrichia leucophrys*  
*Pica nuttalli*  
*Dendroica coronata*

### **Mammals**

Black-tailed jackrabbit  
California ground squirrel

*Lepus californicus*  
*Spermophilus beecheyi*

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PRELIMINARY BIOLOGICAL RESOURCE ASSESSMENT

FOR

**PFE 36 PROPERTY**

(PLACER COUNTY, CALIFORNIA)

September 27, 2002

Prepared for:

**Towne Reality, Inc.**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



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## INTRODUCTION

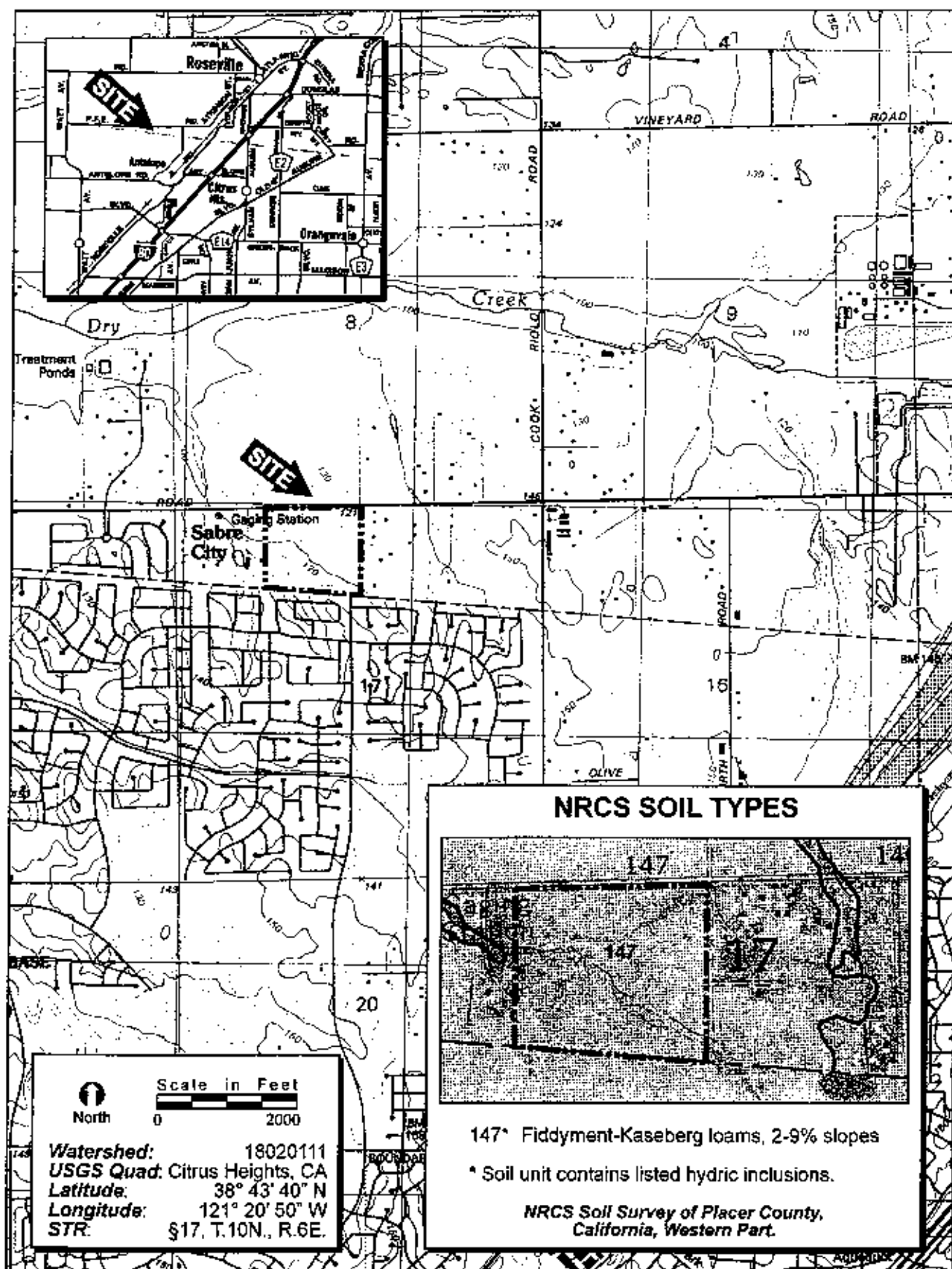
On behalf of Towne Realty, Inc., ECORP Consulting, Inc. has conducted a preliminary biological resource assessment of the PFE 36 site in Placer County, California. The PFE 36 property is a 36-acre undeveloped parcel within unincorporated western Placer County, west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes that front Meandering Way, on the west by undeveloped lands and rural residences, on the north by PFE Road, and on the east by Oly Lane and rural residences. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey) (Figure 1).

## METHODOLOGY

The field assessment was conducted by ECORP biologist Keith Kwan on July 16, 2002, during which time meandering transects were walked through the site, and any potentially jurisdictional waters of the U. S., special-status species or their habitats, and other unique biological features (e.g., native oak trees, riparian habitat) were noted.

Waters of the U.S., if any, were located by visual observations, but three-parameter data were not collected according to *Corps of Engineers Wetlands Delineations Manual* (Environmental Laboratory 1987). The results of this reconnaissance-level wetland assessment are primarily based upon vegetation and obvious hydrologic characteristics.

The special-status species assessment included a taxa-specific literature review, a California Department of Fish and Game Natural Diversity Data Base query, and a reconnaissance-level field survey. Special-status wildlife species observations were made via binoculars and a spotting scope.



**FIGURE 1. Project Site and Vicinity Map**

For the purposes of this assessment, "special-status" refers to those species that:

- Have been designated by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Services (USFWS) as either *rare*, *threatened*, or *endangered*, and are legally protected under the California or federal endangered species acts;
- Are proposed or candidate species being considered for listing under either federal or California Endangered Species Acts; or
- Are of expressly stated interest to resource regulatory agencies, or local jurisdictions, such as CDFG species of special concern, USFWS species of concern, or California Native Plant Society (CNPS) List species.

This assessment of potentially occurring special-status plant and wildlife species is based upon available resources, as described above, and a reconnaissance-level field survey conducted on July 16, 2002. All wildlife and plant species identified on-site during this field survey are reported in Attachment A.

## RESULTS

PFE 36 is currently comprised of non-native annual grassland, willow scrub riparian habitat, and ephemeral drainages and swales. The site topography is gently rolling, and is situated at an elevation of approximately 120 feet above mean sea level. The non-native annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and sticky tarweed (*Holocarpha virgata*).

The riparian willow scrub vegetation community is present in association with a seasonal wetland drainage that receives runoff from the adjacent housing subdivision to the south. The riparian vegetation is comprised primarily of willow species (*Salix* spp.) and Fremont

cottonwood (*Populus fremontii*), with scattered Himalaya blackberry (*Rubus discolor*) and Valley oak (*Quercus lobata*). Understory vegetation is made up of a mixture of upland and wetland plants such as bull thistle (*Cirsium vulgare*), South American vervain (*Verbena bonariensis*), dallissgrass (*Paspalum dilatatum*), annual rabbit-foot grass (*Polypogon monspeliensis*), and ryegrass. A list of plants and wildlife observed on-site is included as Attachment A.

One soil unit has been mapped for the entire site, (147) Fiddymment-Kaseberg loams, 2 to 9 percent slopes (USDA, NRCS 1980).

### **Waters of the U. S.**

During this field assessment, several potentially jurisdictional waters of the U. S. were observed within the PFE 36 site. These include wetlands (i.e., seasonal wetland swales) and other waters (i.e., intermittent drainages) (Figure 2). Based upon this initial reconnaissance-level field survey, there are a total of 1.1 acres of seasonal wetland swales and 0.3 acres of intermittent drainages on-site. If verified by the Corps of Engineers as waters of the U.S., these features would be regulated pursuant to Section 404 of the Clean Water Act.

While not constituting waters of the U.S. *per se*, the willow riparian scrub community along the seasonal wetland swale would likely be regulated under Section 1600- of the California Fish and Game Code. Any impacts to the riparian vegetation would require a Streambed Alteration Agreement.

### **Special-Status Species**

No special-status species were observed during this field reconnaissance. However, habitats present on-site may be considered potentially suitable for several regionally occurring special-status species (Table 1).

P.F.E. ROAD

OLY LANE



SCALE IN FEET



SCALE 1"=200'

WATERS OF THE U.S. ACREAGE <sup>1</sup>	
CLASSIFICATION	EXISTING ACREAGE
Seasonal Wetland Swale	1.1
Intermittent Drainage	0.3
<b>TOTAL</b>	<b>1.4</b>
<sup>1</sup> Subject to U.S. Army Corps of Engineers verification	
Willow Riparian Scrub Habitat	1.2
Valley Oak Tree Location	⊗

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**FIGURE 2. Wetland and Regulated Habitat Assessment**

**Table 1. PFE 36 - Potentially Occurring Special-Status Species**

Common Name	Scientific Name	Federal Status	State Status	Other Status	Habitat Description	Approximate Survey Dates
<b>Plants</b>						
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	-	-	FSC, 1B	marsh, creeks, ditches	May-August
<b>Birds</b>						
White-tailed kite	<i>Elanus leucurus</i>	-	-	CFP, MNB	woodland, grassland	April-June
Northern harrier	<i>Circus cyaneus</i>	-	-	CSC	marsh, grassland	June-July
Swainson's hawk	<i>Buteo swainsoni</i>	-	CT	-	grassland, riparian	March-July
Ferruginous hawk	<i>Buteo regalis</i>	-	-	CSC, MNB	grassland	November-February
Golden eagle	<i>Aquila chrysaetos</i>	-	-	CFP, CSC, CDF	grassland	November-February
Merlin	<i>Falco columbarius</i>	-	-	CSC	woodland, grassland	September-April
Mountain plover	<i>Charadrius montanus</i>	FPT	-	CSC, MNB	grassland, pasture	October-March
Long-billed curlew	<i>Numenius americanus</i>	-	-	CSC, MNB	grassland, pasture	September-March
Burrowing owl	<i>Athene cunicularia</i>	-	-	CSC, MNB, BLM	grassland	April-July
Loggerhead shrike	<i>Lanius ludovicianus</i>	-	-	CSC, MNB	grassland, woodland	April-May
Tricolored blackbird	<i>Agelaius tricolor</i>	-	-	CSC, MNB, BLM	marsh, grassland	April-June

**Status Codes:**

- FPT - Formally Proposed for federal listing as Threatened.
- FSC - U. S. Fish and Wildlife Service Species of Concern
- MNB - U. S. Fish and Wildlife Service Migratory Nongame Birds of Management Concern
- BLM - Bureau of Land Management Sensitive Species
- CT - California listed, Threatened.
- CFP - Fish and Game Code of California Fully Protected Species (§3511-birds, §4700-mammals, §5050-reptiles/amphibians).
- CSC - California Department of Fish and Game Species of Special Concern.
- CDF - California Department of Forestry Sensitive Species
- 1B - California Native Plant Society/Rare or Endangered in California and elsewhere

Portions of the seasonal wetland swales and intermittent drainages on-site represent potentially suitable habitat for one special-status plant species, Sanford's arrowhead (*Sagittaria sanfordii*). No Sanford's arrowhead were observed during this reconnaissance-level survey.

Of the special-status wildlife species that may occur on-site, six are potentially nesting birds, and five are non-nesting birds that include migrants or winter residents during the non-nesting season. The potentially nesting special-status birds include white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), Swainson's hawk (*Buteo swainsoni*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), and tricolored blackbird (*Agelaius tricolor*). Other potentially occurring special-status birds do not nest in this region. These non-nesting migrants and/or winter residents include ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), Merlin (*Falco columbarius*), mountain plover (*Charadrius montanus*), and long-billed curlew (*Numenius americanus*). During the July 2002 field assessment, no special-status birds or other wildlife species were observed on-site.

Two Valley Oaks (*Quercus lobata*) were observed in the northeastern corner of the site. While not considered special-status species as defined, Valley Oaks are regulated by the Placer County Tree Preservation Ordinance.

## CONCLUSION

During this field assessment and survey, several potentially jurisdictional waters of the U. S. totaling approximately 1.4 acres were observed within the PFE 36 site. If impacts to more than 0.5 acre are proposed, an application for an Individual Permit would need to be submitted to the Corps of Engineers (Corps) to obtain authorization under Section 404 of the Clean Water Act.

Impacts of less than ½ acre and involving less than 300 lineal feet of streambed (perennial or intermittent) may (at the Corp's discretion) be authorized under Nationwide Permit No. 39. Impacts to the intermittent drainage (and/or the willow riparian scrub habitat) would require negotiation of a Streambed Alteration Agreement with the California Department of Fish and

Game. No special-status species were observed. However, suitable habitat for some species was identified. The vegetation communities and habitats on-site represent potentially suitable habitat for one special-status, wetland-inhabiting plant, Sanford's arrowhead; and nesting habitat for several species-status birds, including white-tailed kite, northern harrier, Swainson's hawk, burrowing owl, loggerhead shrike, and tricolored blackbird.

Swainson's hawk is listed under the California Endangered Species Act as "threatened". Conversion of Swainson's hawk foraging habitat may be considered by the CEQA lead agency to represent a significant impact requiring mitigation. The other bird species have lesser legal protection; however, the California Fish and Game Code and the Migratory Bird Treaty Act prohibit disturbance to any active nests of any of these species. Prior to commencement of site disturbance or construction activities (including clearing, grading, and/or grubbing), a survey should be conducted by a qualified biologist to determine whether any of these special-status birds are nesting on-site. If nesting birds are found, the CEQA lead agency will determine the measures necessary to avoid or mitigate adverse impacts to the nesting birds. Typically, construction activities may be delayed until young have fledged. Fill in Wetlands or waters constituting habitat for Sanford's arrowhead may also be considered by the CEQA lead agency to represent a significant impact requiring mitigation. Finally, the two Valley oaks will be subject to the Placer County Tree Preservation Ordinance.



## REFERENCES

- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U. S. Army Engineer Waterways Experiment Station. Vicksburg, MS.
- U. S. Department of Agriculture, Soil Conservation Service. 1993. Soil Survey of Sacramento County, California. U.S. Department of Agriculture, Soil Conservation Service. Davis, CA.



## **ATTACHMENT A**

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### **Plants and Wildlife Species Observed On-Site**



**PFE 36 Property - Plants Observed On-site (July 16, 2002)**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Common Name</b>
<i>Amsinckia</i> species	Fiddle-neck	<i>Salix gooddingii</i>	Goodding's black willow
<i>Anthemis cotula</i>	Mayweed	<i>Salix lasiolepis</i>	Arroyo willow
<i>Artemisia douglasiana</i>	Mugwort	<i>Scirpus acutus</i>	Hard-stem bulrush
<i>Avena fatua</i>	Wild oat	<i>Senecio vulgaris</i>	Common groundsel
<i>Brassica rapa</i>	Field mustard	<i>Silene gallica</i>	Catchfly
<i>Briza minor</i>	Little quaking grass	<i>Sorghum halepense</i>	Johnson grass
<i>Brodiaea</i> species	Brodiaea	<i>Taeniatherum caput-medusae</i>	Medusahead grass
<i>Bromus diandrus</i>	Ripgut brome	<i>Trichostema lanceolatum</i>	Vinegar weed
<i>Bromus hordeaceus</i>	Soft brome	<i>Trifolium hirtum</i>	Rose clover
<i>Capsella bursa-pastoris</i>	Shepherd common purse	<i>Triphysaria eriantha</i>	Butter and eggs
<i>Carex</i> species	Sedge	<i>Typha latifolia</i>	Broad-leaf cattail
<i>Centaurea solstitialis</i>	Yellow star-thistle	<i>Verbena bonariensis</i>	South American vervain
<i>Cirsium vulgare</i>	Bull thistle	<i>Vicia</i> species	Vetch
<i>Convolvulus arvensis</i>	Morning glory	<i>Xanthium strumarium</i>	Rough cockle-bur
<i>Conyza canadensis</i>	Canada horseweed		
<i>Cyperus eragrostis</i>	Tall flatsedge		
<i>Dichelostemma capitatum</i>	Blue dicks		
<i>Eleocharis macrostachya</i>	Creeping spikerush		
<i>Epilobium ciliatum</i>	Hairy willow-herb		
<i>Erodium botrys</i>	Filaree		
<i>Eucalyptus globulus</i>	Blue gum		
<i>Galium</i> species	Bedstraw		
<i>Geranium dissectum</i>	Cut-leaved geranium		
<i>Helianthus annuus</i>	Common sunflower		
<i>Hemizonia fitchii</i>	Fitch's spikeweed		
<i>Heracleum lanatum</i>	Cow parsnip		
<i>Holocarpha virgata</i>	Sticky tarweed		
<i>Hordeum marinum</i>	Mediterranean barley		
<i>Hordeum murinum</i>	Barley		
<i>Hypochaeris glabra</i>	Smooth cat's-ear		
<i>Juncus bufonius</i>	Toad rush		
<i>Lactuca serriola</i>	Prickly lettuce		
<i>Lolium multiflorum</i>	Ryegrass		
<i>Lotus purshianus</i>	Spanish clover		
<i>Medicago polymorpha</i>	Bur clover		
<i>Paspalum dilatatum</i>	Dallis grass		
<i>Plantago lanceolata</i>	English plantain		
<i>Polygonum persicaria</i>	Lady's thumb		
<i>Populus fremontii</i>	Fremont's cottonwood		
<i>Prunus</i> species	Cultivated fruit tree		
<i>Quercus lobata</i>	Valley oak		
<i>Ranunculus muricatus</i>	Spiny-fruit buttercup		
<i>Raphanus sativus</i>	Purple wild radish		
<i>Rumex crispus</i>	Curly dock		
<i>Rumex pulcher</i>	Fiddle dock		
<i>Salix exigua</i>	Sandbar willow		

## **PFE Property - Wildlife Observed On-Site (July 16, 2002)**

<b>Common Name</b>	<b>Scientific Name</b>
<u>Amphibians and Reptiles</u>	
Pacific chorus frog	<i>Pseudacris regilla</i>
Western fence lizard	<i>Sceloporus occidentalis</i>
<u>Birds</u>	
Red-tailed hawk	<i>Buteo jamaicensis</i>
Killdeer	<i>Charadrius vociferus</i>
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Downy woodpecker	<i>Picoides pubescens</i>
Western kingbird	<i>Tyrannus verticalis</i>
Western scrub-jay	<i>Aphelocoma californica</i>
Oak titmouse	<i>Baeolophus inornatus</i>
Bewick's wren	<i>Thryomanes bewickii</i>
American robin	<i>Turdus migratorius</i>
Northern mockingbird	<i>Mimus polyglottos</i>
European starling	<i>Sturnus vulgaris</i>
Western meadowlark	<i>Sturnella neglecta</i>
Bullock's oriole	<i>Icterus bullockii</i>
House finch	<i>Carpodacus mexicanus</i>
House sparrow	<i>Passer domesticus</i>
<u>Mammals</u>	
Black-tailed jackrabbit	<i>Lepus californicus</i>
California ground squirrel	<i>Spermophilus beecheyi</i>

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PRELIMINARY WETLAND AND SPECIAL-STATUS SPECIES ASSESSMENT

FOR

**PFE 14 PROPERTY**

PLACER COUNTY, CALIFORNIA

JANUARY 3, 2003

*PREPARED FOR:*

COUNTY BUILDERS, LLC



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



**PRELIMINARY WETLAND  
AND  
SPECIAL-STATUS SPECIES ASSESSMENT**

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- Attachment B – CNDDB Printout for Citrus Heights Quadrangle



## INTRODUCTION

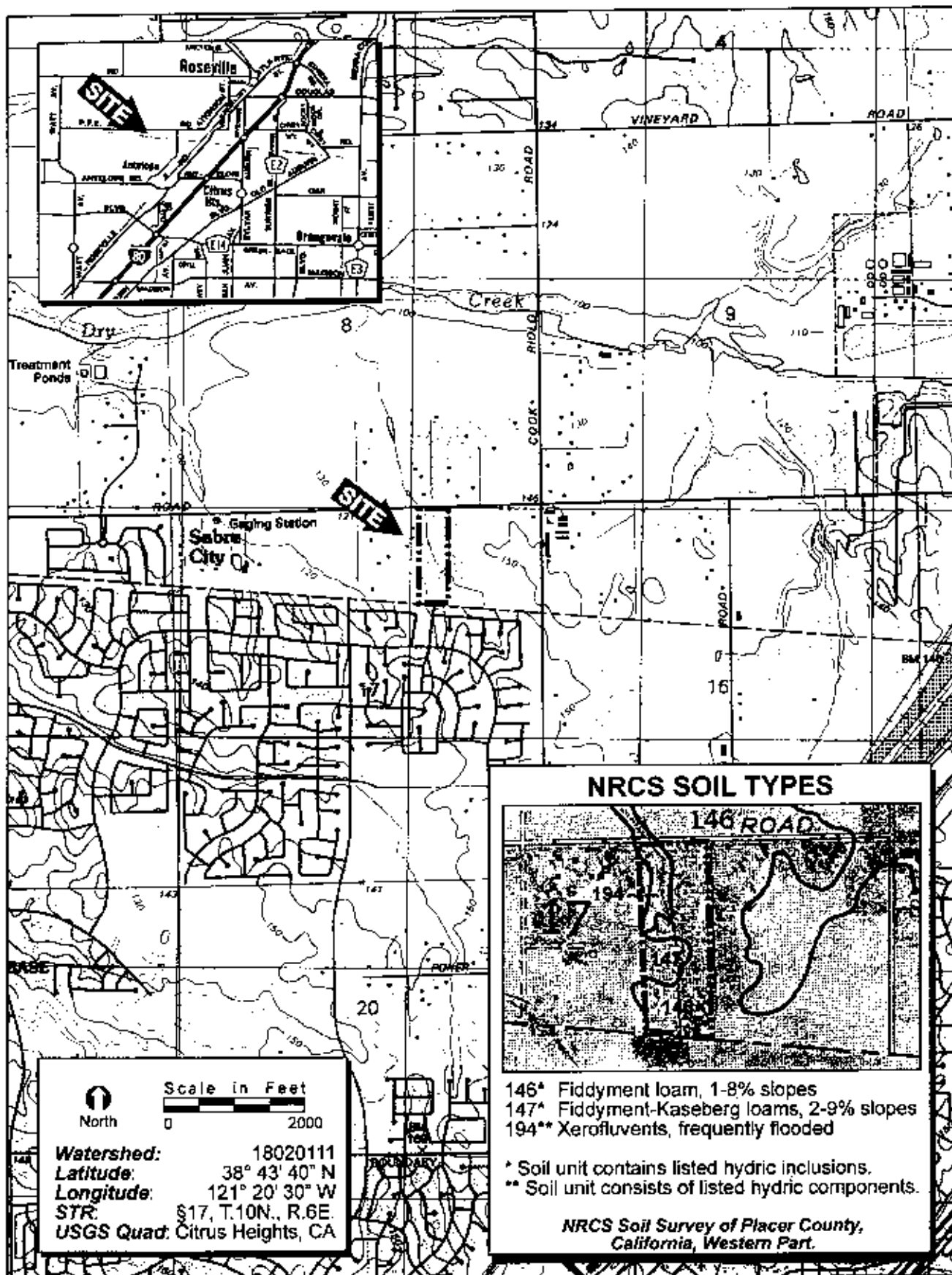
On behalf of County Builders, LLC, ECORP Consulting, Inc. has conducted a preliminary wetland and special-status species assessment of the PFE 14 site in Placer County, California. The PFE 14 property is a 13.5-acre undeveloped parcel within unincorporated western Placer County, west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes that front Copper Ridge Way and English Hills Way, on the east and west by undeveloped lands and rural residences, and on the north by PFE Road. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey) (Figure 1).

## METHODOLOGY

The field assessment was conducted by ECORP biologist, Keith Kwan, on December 12, 2002, during which time meandering transects were walked through the site, and any potentially jurisdictional waters of the U.S., special-status species or their habitats, and other unique biological features (e.g., native oak trees, riparian habitat) were noted.

Waters of the U.S., if any, were located by visual observations, but three-parameter data were not collected according to protocol outlined in the *Corps of Engineers Wetlands Delineations Manual* (Environmental Laboratory, 1987). The results of this reconnaissance-level wetland assessment are primarily based upon vegetation and obvious hydrologic characteristics.

The special-status species assessment included a taxa-specific literature review, a California Department of Fish and Game Natural Diversity Data Base (CNDDDB) (CDFG, 2002) query, and a reconnaissance-level field survey. Special-status wildlife species observations were made via binoculars and a spotting scope.



**FIGURE 1. Project Site and Vicinity**

For the purposes of this assessment, "special-status" refers to those species that:

- Have been designated by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Services (USFWS) as either *rare*, *threatened*, or *endangered*, and are legally protected under the California or federal endangered species acts;
- Are proposed or candidate species being considered for listing under either federal or California Endangered Species Acts; or
- Are of expressly stated interest to resource regulatory agencies, or local jurisdictions, such as CDFG species of special concern, USFWS species of concern, or California Native Plant Society (CNPS) List species.

This assessment of potentially occurring special-status plant and wildlife species is based upon available resources, as described above, and a reconnaissance-level field survey conducted on December 12, 2002.

## RESULTS

PFE 14 is currently comprised of non-native annual grassland, orchard, and rural residential. The site topography is gently rolling, and is situated at an elevation of approximately 120 feet to 140 feet above mean sea level. The southern portion of the site is made up of non-native annual grassland with a rural residence and scattered outbuildings. A small enclosure is currently being grazed by goats. Non-native trees in this area include sweet gum (*Liquidambar styraciflua*) and blue gum (*Eucalyptus globulus*). The non-native annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and rose clover (*Trifolium hirtum*).

The northern half of the site is comprised of almond (*Prunus dulcis*). The trees within the orchard are evenly spaced throughout the site and average approximately 20 feet in height.

The understory of the trees is made up of non-native annual grassland. Several blue oaks (*Quercus douglasii*) are located at the perimeter of the orchard. A list of plants and wildlife observed on-site is included as Attachment A.

One soil unit has been mapped for the entire site, (146) Fiddymment loam, 1 to 8 percent slopes, (147) Fiddymment-Kaseberg loams, 2 to 9 percent slopes, and (194) Xerofluvents, frequently flooded (USDA, NRCS 1980) (Figure 1).

### **Waters of the U. S.**

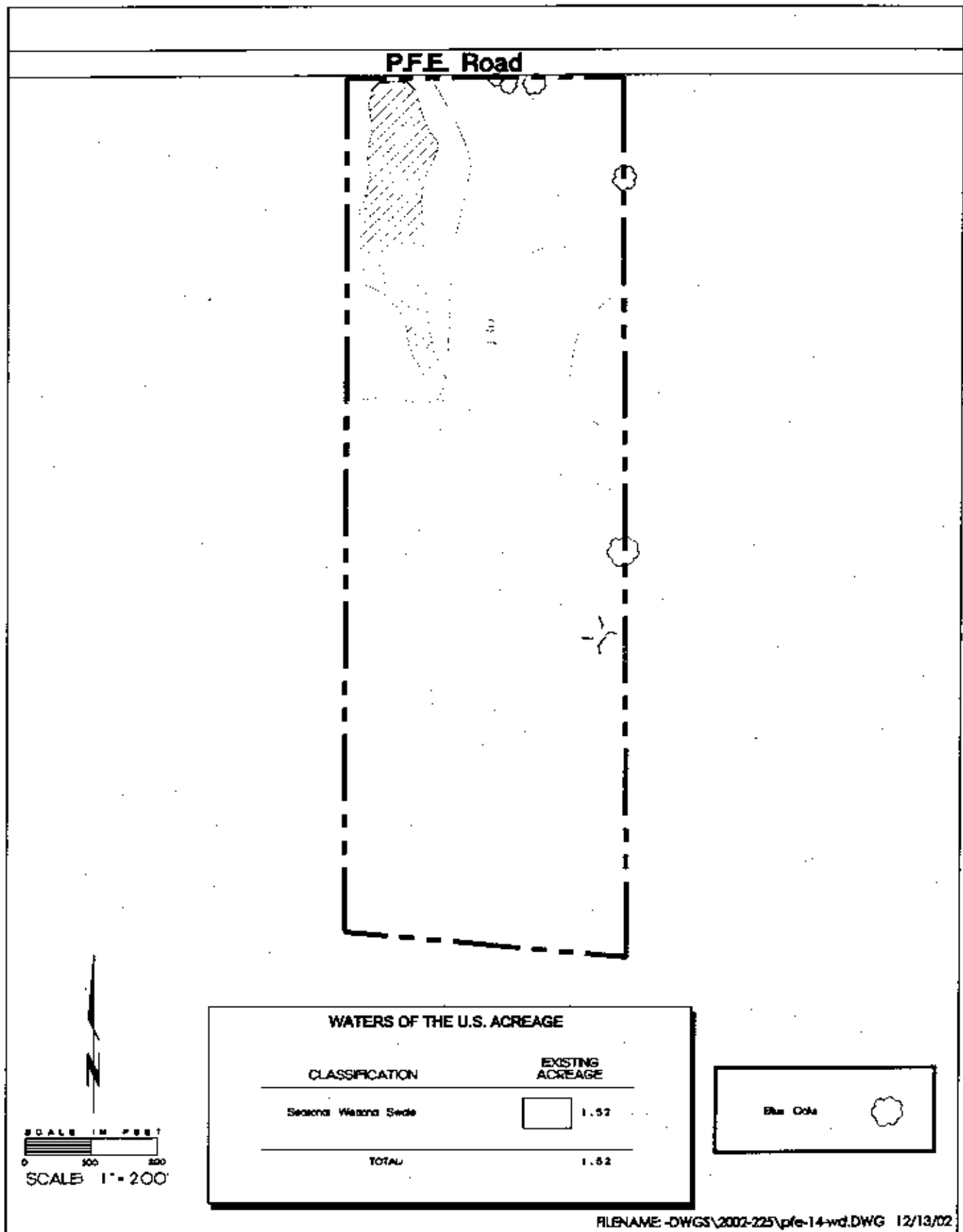
During this field assessment, one potentially jurisdictional water of the U.S. was observed. A seasonal wetland swale runs through the site and flows from the south to north. The swale totals approximately 1.5 acres (Figure 2). This wetland feature is located within a topographic swale and has dominant hydrophytic plants, but does not have a bed-and-bank condition (i.e., stream or creek). If verified by the Corps of Engineers as water of the U.S., this feature would be regulated pursuant to Section 404 of the Clean Water Act.

### **Special-Status Species**

One special-status species was observed during this field reconnaissance, a white-tailed kite (*Elanus leucurus*). This individual was not observed nesting, as white-tailed kites nest during the spring, generally April through June.

According to the CNDDDB, there are no previously documented occurrences of special-status species within the PFE 14 site (Attachment B). However, habitats present on-site may be considered potentially suitable for several regionally occurring special-status species (Table 1). These include four potentially nesting bird species. Due to the absence of suitable habitat, there are no potentially occurring special-status plants, invertebrates, fish, amphibians, or reptiles on the project site.





**FIGURE 2. Preliminary Wetland Assessment**

2002-225 PFE 14

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

Table 1. PFE 14 (Placer County, California) - Potentially Occurring Special-Status Species

Common Name	Scientific Name	Federal Status	State Status	Other Status	Habitat Description	Approximate Survey Dates
<b>Birds</b>						
White-tailed kite (nesting)	<i>Elanus leucurus</i>	-	-	CFP, MNB	woodland, grassland	April-June
Cooper's hawk (nesting)	<i>Accipiter cooperi</i>	-	-	CSC	woodland	April-June
Loggerhead shrike	<i>Lanius ludovicianus</i>	-	-	CSC, MNB	grassland, woodland	April-May
Lark sparrow (nesting)	<i>Chondestes grammacus</i>	-	-	MNB	oak woodland, scrub	year round res. (nests April-May)
<b>Status Codes:</b>						
MNB - U. S. Fish and Wildlife Service Migratory Nongame Birds of Management Concern						
BUM - Bureau of Land Management Sensitive Species						
FS - U. S. Forest Service Sensitive Species						
CFP - Fish and Game Code of California Fully Protected Species (§3511-birds, §4701-mammals, §5050-reptiles/amphibians).						
CSC - California Department of Fish and Game Species of Special Concern.						

Potential nesting special-status birds include white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), loggerhead shrike (*Lanius ludovicianus*), and lark sparrow (*Chondestes grammacus*). In general, the nesting season for these species is April through June.

Five blue oaks (*Quercus douglasii*) are located along the perimeter of the orchard on the northern and eastern boundaries of the site. While not considered special-status species as defined, blue oaks are regulated by the Placer County Tree Preservation Ordinance (County of Placer, 1991).

## CONCLUSION

During this field assessment and survey, potentially jurisdictional waters of the U.S. totaling approximately 1.5 acres of seasonal wetland swale were noted within the PFE 14 site. Fill of more than 0.5 acre of waters of the U.S. would require authorization under Section 404 of the Clean Water Act via submittal of an Individual Permit application. Fill of less than 0.5 acre of waters may (at the Corp's discretion) be authorized under Nationwide Permit No. 39.

Suitable habitat for special-status species was identified. The vegetation communities and habitats on-site represent potentially suitable nesting habitat for several species-status birds, including white-tailed kite, Cooper's hawk, loggerhead shrike, and lark sparrow. These bird species are not listed and protected pursuant to either California or federal Endangered Species Act, but have legal protection through the California Fish and Game Code and the Migratory Bird Treaty Act, which prohibit disturbance to any active nests of any of all bird species. Prior to commencement of site disturbance or construction activities (including clearing, grading, and/or grubbing), a survey should be conducted by a qualified biologist to determine whether any of these special-status birds are nesting on-site. If nesting birds are found, the CEQA lead agency will determine the measures necessary to avoid or mitigate adverse impacts to the nesting birds. Typically, construction activities may be delayed until the young have fledged.

Finally, the blue oaks will be subject to the Placer County Tree Preservation Ordinance. Any impacts to native oak trees would require mitigation, which may include replacement tree plantings, a revegetation plan, or fee payment to the County (based on current market value).

## REFERENCES

California, State of. No Date. California Fish and Game Code.

California Department of Fish and Game. 2002. *Rarefind 2* personal computer program. Sacramento, CA.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U. S. Army Engineer Waterways Experiment Station. Vicksburg, MS.

Placer, County of. 1991. Placer County Code, Chapter 36. Placer County Tree Preservation Ordinance adopted October 29, 1991.

U. S. Department of Agriculture, Soil Conservation Service. 1980. Soil Survey of Placer County, California. U.S. Department of Agriculture, Soil Conservation Service. Davis, CA.



## ATTACHMENT A

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Plants and Wildlife Observed On-Site





**P.F.E. 14 Property (Placer County, California)**  
**Plants Observed On-Site (December 12, 2002)**

<b>Scientific Name</b>	<b>Common Name</b>
<i>Avena fatua</i>	Wild oat
<i>Bromus hordeaceus</i>	Soft brome
<i>Centaurea solstitialis</i>	Yellow star-thistle
<i>Convolvulus arvensis</i>	Morning glory
<i>Cynodon dactylon</i>	Bermuda grass
<i>Cyperus eragrostis</i>	Tall flatsedge
<i>Epilobium brachycarpum</i>	Panicked willow-herb
<i>Erodium botrys</i>	Filaree
<i>Eucalyptus globulus</i>	Blue gum
<i>Geranium molle</i>	Hairy geranium
<i>Hordeum murinum</i>	Barley
<i>Lactuca serriola</i>	Prickly lettuce
<i>Liquidambar styraciflua</i>	Sweet gum
<i>Lolium multiflorum</i>	Ryegrass
<i>Ludwigia peploides var peploides</i>	Water primrose
<i>Lythrum hyssopifolium</i>	Hyssop loosestrife
<i>Mentha arvensis</i>	Field mint
<i>Mentha pulegium</i>	Pennyroyal
<i>Polygonum persicaria</i>	Lady's thumb
<i>Polypogon monspeliensis</i>	Annual rabbit-foot grass
<i>Prunus dulcis</i>	Almond (cultivated)
<i>Quercus douglasii</i>	Blue oak
<i>Rumex conglomeratus</i>	Clustered dock
<i>Rumex crispus</i>	Curly dock
<i>Salix gooddingii</i>	Goodding's black willow
<i>Taeniatherum caput-medusae</i>	Medusahead grass
<i>Trifolium hirtum</i>	Rose clover
<i>Typha species</i>	Cattail

**P.F.E. 14 Property (Placer County, California)**  
**Wildlife Observed On-Site (December 12, 2002)**

Common Name	Scientific Name
<u>Birds</u>	
White-tailed kite	<i>Elanus leucurus</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Ring-necked pheasant	<i>Phasianus colchicus</i>
Rock dove	<i>Columba livia</i>
Mourning dove	<i>Zenaida macroura</i>
Anna's hummingbird	<i>Calypte anna</i>
Nuttall's woodpecker	<i>Picoides nuttallii</i>
Northern flicker	<i>Colaptes auratus</i>
Black phoebe	<i>Sayornis nigricans</i>
Western scrub-jay	<i>Aphelocoma californica</i>
Yellow-billed magpie	<i>Pica nuttalli</i>
American crow	<i>Corvus brachyrhynchos</i>
Oak titmouse	<i>Baeolophus inornatus</i>
Bushtit	<i>Psaltirparus minimus</i>
House wren	<i>Troglodytes aedon</i>
Ruby-crowned kinglet	<i>Regulus calendula</i>
Northern mockingbird	<i>Mimus polyglottos</i>
European starling	<i>Sturnus vulgaris</i>
Yellow-rumped warbler	<i>Dendroica coronata</i>
Spotted towhee	<i>Pipilo maculatus</i>
California towhee	<i>Pipilo crissalis</i>
Song sparrow	<i>Melospiza melodia</i>
Lincoln's sparrow	<i>Melospiza lincolnii</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Golden-crowned sparrow	<i>Zonotrichia atricapilla</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
House finch	<i>Carpodacus mexicanus</i>
Lesser goldfinch	<i>Carduelis psaltria</i>
American goldfinch	<i>Carduelis tristis</i>
<u>Mammals</u>	
Black-tailed jackrabbit	<i>Lepus californicus</i>

## ATTACHMENT B

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CNDDDB Printout for Citrus Heights Quadrangle



California Department of Fish and Game  
Natural Diversity Data Base

Citrus Heights, CA Quadrangle

ELANUS LEUCURUS  
WHITE-TAILED KITE  
Element Code: ABNKC06010

—List Status—  
Federal: None  
State: None

—NNDP Element Ranks—  
Global: G5  
State: S3

—Other Lists—  
CDFG Status:

—Habitat Associations—

General: (NESTING) ROLLING FOOTHILLS/VALLEY MARGINS w/SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND  
Micro: OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Occurrence No. 32	Map Index: 24831	—Dates Last Seen—	Lat/Long: 38°37'45" / 121°16'58"	Township: 09N
Occ Rank: Good		Element: 1990-05-05	UTM: Zone-10 N4276820 E649475	Range: 06E
Origin: Natural/Native occurrence		Site: 1990-05-05	Precision: SPECIFIC	Section: XX Qtr XX
Presence: Presumed Extant			Symbol Type: POINT	Meridian: M
Trend: Unknown			Radius: 90 meters	Elevation: 90 ft

Main Source: JOHNSON, D. 1990 (CBS)  
Quad Summary: CITRUS HEIGHTS 13812163/512A1  
County Summary: SACRAMENTO

SNA Summary: Goethe Park  
Location: SACRAMENTO BAR, ON THE NORTH SIDE OF THE AMERICAN RIVER, NEAR THE END OF BANNISTER AVENUE, FAIR OAKS.

—Comments—

Distribution:  
Ecological: HABITAT CONSISTS OF A DISTURBED RIPARIAN AREA CONTAINING GRAVEL DREDGE TAILINGS; VEGETATED BY LIVE OAK AND COTTONWOOD TREES.

Threat:  
General: ADULT WAS OBSERVED SETTLING DOWN ON THE NEST IN 1990.

Owner/Manager: SAC COUNTY

Citrus Heights, CA Quadrangle

<b>RIPARIA RIPARIA</b> <b>BANK SWALLOW</b> Element Code: AEPAC0010	List Status Federal: None State: Threatened	NODB Element Rank Global: G5 State: S2B3	Other Lists CDFG Status:
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Habitat Associations

General: (NESTING) COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.  
 Micro: REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.

Occurrence No. 76 Map Index: 11013 Dates Last Seen: Lat/Long: 36°37'49" / 121°13'33" Township: 09N  
 Occ Rank: Good Element: 1989-05-26 UTM: Zone: 10 N4276939 E648631 Range: 06E  
 Origin: Natural/Native occurrence Site: 1989-05-26 Precision: SPECIFIC Section: XX Qtr XX  
 Presence: Presumed Extant Symbol Type: POLYGON Meridian: M  
 Trend: Stable Area: 25.6 ac Elevation: 100 ft  
 Main Source: HUMPHREY, J. 1956 (PERS)  
 Quad Summary: CITRUS HEIGHTS (3612163/512A)  
 County Summary: SACRAMENTO  
 SNA Summary: Goethe Park  
 Location: NORTH SIDE OF THE AMERICAN RIVER, JUST DOWNSTREAM FROM THE SAN JUAN RAPIDS, AMERICAN RIVER PARKWAY, SACRAMENTO.

Comments:  
 Distribution:  
 Ecological: HABITAT CONSISTS OF A VERTICAL BLUFF, CONTAINING 40-50 NEST HOLES; SEVERAL LARGE COTTONWOODS RISE UP FROM THE RIVER'S EDGE IN CLOSE PROXIMITY TO THE NEST SITE.  
 Threat: POSSIBLE THREAT FROM HUMANS, AS SITE IS JUST BELOW SOME PRIVATE RESIDENCES.  
 General: NESTING COLONY OF 20 INDIVIDUALS OBSERVED IN 1988; 120 ADULTS OBSERVED FORAGING (ALONG WITH NORTHERN ROUGH-WINGED SWALLOWS) AND ENTERING NESTING BURROWS ON 13 APRIL 1989; 40 ADULTS OBSERVED FORAGING ON 6 MAY 1989.  
 Owner/Manager: SAC COUNTY

Occurrence No. 197 Map Index: 25468 Dates Last Seen: Lat/Long: 38°38'15" / 121°15'28" Township: 09N  
 Occ Rank: Good Element: 1990-04-27 UTM: Zone: 10 N4277783 E651642 Range: 07E  
 Origin: Natural/Native occurrence Site: 1990-04-27 Precision: SPECIFIC Section: XX Qtr XX  
 Presence: Presumed Extant Symbol Type: POLYGON Meridian: M  
 Trend: Unknown Area: 17.2 ac Elevation: 75 ft  
 Main Source: MOHR, B. 1989 (CBSI)  
 Quad Summary: CITRUS HEIGHTS (3812163/512A)  
 County Summary: SACRAMENTO  
 SNA Summary:  
 Location: SOUTH SIDE OF THE AMERICAN RIVER, 0.6 MILE UPSTREAM FROM THE SUNRISE BLVD BRIDGE, AMERICAN RIVER PARKWAY, FAIR OAKS.

Comments:  
 Distribution:  
 Ecological: HABITAT CONSISTS OF A RECENTLY-ERODED SANDY BLUFF, 12-15 FEET HIGH; NEARBY VEGETATION INCLUDES A BROAD BAND OF DECIDUOUS RIPARIAN FOREST AND A NARROW BAND OF GRASS/THISTLE.  
 Threat: MAIN THREAT TO THE SITE IS FROM HUMAN RECREATION.  
 General: 8 ADULTS OBSERVED ENTERING BURROWS ON 7 MAY 1989; 15-20 BIRDS OBSERVED DURING A FOLLOW-UP VISIT IN JUNE 1989. A MIXED GROUP OF BANK SWALLOWS (15-20 MINIMUM) AND NORTHERN ROUGH-WINGED SWALLOWS WERE OBSERVED ON 27 APRIL 1991.  
 Owner/Manager: SAC COUNTY

California Department of Fish and Game  
Natural Diversity Data Base

Citrus Heights, CA Quadrangle

NORTHERN VOLCANIC MUD FLOW VERNAL POOL

Element Code: CIT44132CA

List Status  
Federal: None  
State: None

NDDB Element Rank  
Global: G1  
State: S1.1

Other Lists

Habitat Associations

General: None for this Element  
Micro: None for this Element

Occurrence No. 1 Map Index: 11782 ---Dates Last Seen--- Lat/Long: 38°45'07" / 121°15'12" Township: 15N  
Occ Rank: Unknown Element: 1982-XX-XX UTM: Zone-10 N4290497 E651789 Range: 07E  
Origin: Natural/Native occurrence Site: 1982-XX-XX Precision: SPECIFIC Section: 06 Qtr XX  
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M  
Trend: Unknown Area: 412.3 ac Elevation: 240 ft  
Main Source: WESCO 1982 (LIT)  
Quad Summary: ROSEVILLE (3812173/528D)\*, FOLSOM (3812162/511E), CITRUS HEIGHTS (3812163/513A), ROCKLIN (3812172/527C)  
County Summary: PLACER  
SNA Summary: Roseville Eastern Vernal Pools  
Location: BETWEEN DOUGLAS BLVD & MINERS RAVINE JUST EAST OF ROSEVILLE.  
---Comments---  
Distribution:  
Ecological: DIVERSITY OF POOL TAXA PRESENT INCLUDES DICHELSTEMMA LACUNA-VERNALIS. MOST OF THIS LARGE AREA IS ON VOLCANIC  
SUBSTRATE. ~50 ACRES IN THE NW PORTION OF THE BOUNDED AREA IS LOW TERRACE FORMATION W/HARDPAN VERNAL POOLS.  
Threat:  
General: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO  
Owner/Manager: UNKNOWN

California Department of Fish and Game  
Natural Diversity Data Base

Citrus Heights, CA Quadrangle

*LIMNOSIELLA OCCIDENTALIS*  
CALIFORNIA LINDERIELLA  
Element Code: ICRAC6010

—List Status—  
Federal: None  
State: None

—NDB Element Ranks—  
Global: G2S3  
State: S2S3

—Other Lists—  
CFC Status:

—Habitat Associations—

General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLOVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.  
Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Occurrence No. 64 Map Index: 32518 —Dates Last Seen— Lat/Long: 38°41'21" / 121°17'46" Township: 13N  
Occ Rank: Unknown Element: 1996-03-36 UTM: Zone-10 N4203457 E6648193 Range: 06E  
Origin: Natural/Native occurrence Site: 1996-05-27 Precision: SPECIFIC Section: 26 Qcr SW  
Presence: Presumed Extant Symbol Type: POINT Meridian: M  
Trend: Unknown Radius: 80 meters Elevation: 125 ft  
Main Source: GIBSON, J. & T. SKORDAL 1996 (LIT)  
Quad Summary: CITRUS HEIGHTS (3812163/5:2A)  
County Summary: SACRAMENTO  
SNA Summary:  
Location: STOCK RANCH: 3.8 KM SW OF AUBURN ROAD X SYLVAN ROAD.

—Comments—  
Distribution: 1995-18 SEASONAL WETLAND/VERNAL POOL HABITATS SURVEYED; POOLS RANGED IN SIZE FROM 65 TO 9,920 SQ. FT.  
LINDERIELLA WAS FOUND IN SW-4. 1996 9 SEASONAL WETLAND/VERNAL POOL HABITAT SURVEYED; LINDERIELLA ONLY OBSERVED  
IN SW-4.  
Ecological: SEASONAL WETLAND/VERNAL POOL HABITAT IN NON-NATIVE GRASSLAND, ORCHARDS, OAK WOODLAND AND PORTIONS OF SAN JUAN  
& ARCADE CREEKS W/ ASSOCIATED DRAINAGES; PLANT SPECIES: AVENA SP., BROMUS RIGIDUS, B. MOLLIS, PERENNIAL RYE,  
ERUPTUM & VICIA SP.  
Threat: PREDATION BY Hyla tadpoles; COMPETITION PRESSURE FROM AQUATIC INSECTS; HEAVY VEHICLE USE ON SITE.  
General: POOL #SW-4: LINDERIELLA OBSERVED IN 1995 (1/13, 1/27 & 1/9) AND 1996 (2/7, 2/21 & 3/6); SEVERAL GENERATIONS OF  
SHRIMP OBSERVED, WITH LACK OF ADULTS IN LAST GENERATION, POSSIBLY DUE TO PREDATION FROM Hyla tadpoles.  
Owner/Manager: PVT-STOCK RANCH



Citrus Heights, CA Quadrangle

*DESMOCERUS CALIFORNICUS DIMORPHUS*  
VALLEY ELDERBERRY LONGHORN BEETLE  
Element Code: 11CCL48011

—List Status—  
Federal: Threatened  
State: None

NDDB Element Ranks  
Global: G3T2  
State: S2

—Other Lists—  
COPG Status:

—Habitat Associations—

General: OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*SAMBUCUS MEXICANA*).  
Micro: PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER. SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Occurrence No. 1      Map Index: 11640      —Dates Last Seen—      Lat/Long: 38°36'55" / 121°18'09"      Township: 09N  
Occ Rank: Unknown      Element: 1987-04-23      UTM: Zone-18 N4275244 E647788      Range: D6E  
Origin: Natural/Native occurrence      Site: 1987-04-23      Precision: SPECIFIC      Section: XX Qtr XX  
Presence: Presumed Extant      Symbol Type: POLYGON      Meridian: M  
Trend: Unknown      Area: 1,403.8 ac      Elevation: 60 ft  
Main Source: ARNOLD, R. 1985 (PERS)  
Quad Summary: CARMICHAEL (3812153/512D)\*, FOLSOM (3812162/511B), CITRUS HEIGHTS (3812163/512A)  
County Summary: SACRAMENTO  
SNA Summary: Goethe Park  
Location: ALONG AMERICAN RIVER, NIMBUS FLAT AREA OF LAKE NATOMA SOUTH TO DOWNSTREAM END OF GOETHE PARK.  
—Comments—  
Distribution: FOUND ALONG THE AMERICAN RIVER PARKWAY TO THE LOWER SOUTHEAST SHORE OF LAKE NATOMA; INCLUDES CRITICAL AND ESSENTIAL HABITAT AREAS.  
Ecological: LARVAE ARE STEM AND ROOT BORERS OF ELDERBERRY; EXIT HOLES ARE ROUND. SUPRETTID LARVAE ALSO BORE INTO ELDERBERRY; EXIT HOLES ARE OVAL. ADULTS FEED ON FOLIAGE AND FLOWERS.  
Threat: POPULATIONS OF VEB ARE REDUCED AS ELDERBERRY GROVES ARE REDUCED IN NUMBER.  
General: 1987 SURVEY OF NIMBUS FLATS FOUND BOTH OLD AND NEW EXIT HOLES.  
Owner/Manager: SAC COUNTY, DPR

Citrus Heights, CA Quadrangle

SAGITTARIA SANFORDII SANFORD'S ARROWHEAD Element Code: SMALID040QD		—List Status— Federal: None State: None	NDBB Element Ranks Global: G3 State: S3.2	Other Lists CNPS List: 1B R-E-D Code: 2-2-3
—Habitat Associations— General: MARSHES AND SWAMPS. Micro: IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-610M.				
Occurrence No. 46	Map Index: 38124	—Dates Last Seen— Element: 1997-06-18 Site: 1997-06-18	Lat/Long: 38°42'58" / 121°18'53" UTM: Zone-10 N4286415 E646475 Precision: SPECIFIC Symbol Type: POLYGON Area: 16.9 ac	Township: 10N Range: 06E Section: 15 Qtr SW Meridian: M Elevation: 150 ft
Occ Rank: Fair Origin: Natural/Native occurrence Presence: Presumed Extant Trend: Unknown Main Source: NORTON, X. 1993 (MAPI) Quad Summary: CITRUS HEIGHTS (3812163/512A) County Summary: SACRAMENTO SNA Summary: Location: EAST SIDE OF ROSEVILLE ROAD ABOUT 0.9 MILE FROM ANTELOPE ROAD, ANTELOPE. —Comments— Distribution: TWO COLONIES MAPPED BY NORTON IN 1993 IN DRAINAGES BETWEEN ROSEVILLE ROAD AND VILLAVIEW DRIVE AND NORTH OF OUTLOOK DRIVE. ONLY THE SOUTH COLONY REMAINING IN 1997. Ecological: UNLINED +/- NATURAL CHANNEL WITH SALIX AND TYPHA. SAGITTARIA DOMINATES MUCH OF THIS SHORT WATERCOURSE. Threat: SITE SURROUNDED BY NEW DEVELOPMENT. NORTH COLONY OBLITERATED BY EARTHMOVING EQUIPMENT. General: 1000'S OF PLANTS OBSERVED IN 1997. THIS SMALL SECTION OF HABITAT APPEARS TO BE SET ASIDE BY THE CURRENT DEVELOPERS. CHANNEL IS MARKED AND EQUIPMENT APPEARS TO AVOID IMPACTING AREA. Owner/Manager: UNKNOWN				
Occurrence No. 49	Map Index: 37753	—Dates Last Seen— Element: 1997-06-18 Site: 1997-06-18	Lat/Long: 38°43'20" / 121°18'35" UTM: Zone-10 N4287035 E646946 Precision: SPECIFIC Symbol Type: POINT Radius: 80 meters	Township: 10N Range: 06E Section: 15 Qtr NW Meridian: M Elevation: 150 ft
Occ Rank: Good Origin: Natural/Native occurrence Presence: Presumed Extant Trend: Unknown Main Source: NOSAL, T. ET AL 1997 (CBS) Quad Summary: CITRUS HEIGHTS (3812163/512A) County Summary: PLACER, SACRAMENTO SNA Summary: Location: ROSEVILLE ROAD AT WHITE AVE, JUST SOUTH OF SAC/PLA COUNTY LINE, ANTELOPE. —Comments— Distribution: WEST OF ROSEVILLE ROAD IN CHANNEL BETWEEN ROAD AND RR TRACKS. NEAR CENTER OF SECTION. Ecological: FRESHWATER MASH WITH TYPHA. Threat: General: ABOUT 1000 PLANTS OBSERVED IN 1997. MOST PLANTS OCCUR WITHIN TWO 10X10 OPENINGS WITHIN THICK TYPHA STAND. SITE APPEARS TO BE UNMAINTAINED CHANNEL, FEW VISITORS. NO OBVIOUS THREATS. Owner/Manager: UNKNOWN				
Occurrence No. 50	Map Index: 37757	—Dates Last Seen— Element: 1994-07-21 Site: 1994-07-21	Lat/Long: 38°42'26" / 121°15'40" UTM: Zone-10 N4285512 E651238 Precision: SPECIFIC Symbol Type: POLYGON Area: 21.9 ac	Township: 10N Range: 06E Section: 24 Qtr SE Meridian: M Elevation: 190 ft
Occ Rank: Excellent Origin: Natural/Native occurrence Presence: Presumed Extant Trend: Unknown Main Source: WYMER, N. 1994 (OBS) Quad Summary: CITRUS HEIGHTS (3812163/512A) County Summary: SACRAMENTO SNA Summary: Location: CITRUS HEIGHTS; ALONG CREEK JUST EAST OF FAIR OAKS BLVD BETWEEN OAK BLVD AND OLD AUBURN ROAD. —Comments— Distribution: MAPPED BETWEEN VILLA OAKS AND OLD AUBURN ROAD ALONG SUNRISE CREEK. Ecological: DRAINAGE CHANNEL WITH SLOW-MOVING WATER. ASSOCIATED WITH ECHINOCHLOA CRUSGALLI, POLYGONUM LAPATHIFOLIUM, PASPALUM DILATUM, CYPERUS ERAGROSTIS, AND SORGHUM HALAPENSE. Threat: HERBICIDE SPRAYING AND CHANNEL MAINTENANCE. General: NUMEROUS PLANTS SEEN IN JUNE 1994; CHANNEL CLEARED IN EARLY JULY 1994; PLANTS RECOLONIZED/NUMEROUS IN LATE JULY 1994. Owner/Manager: SAC COUNTY PUBLIC WORKS				

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**MEMORANDUM****January 18, 2005****TO:****COMPANY:****FROM: Linda Rivard****SUBJECT: Summary of Almond Ranch Biological Survey (1-12-05)**

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The purpose of this memorandum is to discuss the results of a biological survey that was conducted on the Almond Ranch portion of the Whisper Creek project site that was not previously covered by the biological surveys conducted by ECORP, Inc. Although a wetland delineation and valley elderberry longhorn beetle habitat survey has been completed for this parcel, no biological assessment had been conducted. Foothill Associates biologists conducted a biological survey of the Almond Ranch parcel on January 12, 2005 to ensure complete coverage of the project site. The use of this information was used to supplement existing biological information in preparation of an EIR for the project.

The survey was conducted by walking the site and recording habitat conditions and wildlife observations. Binoculars were used to aid in wildlife identification and nest locations. The site is vacant of any structures, but a debris pile is located in the southwestern portion of the site. A majority of the debris pile consisted of discarded orange construction fencing which appeared relatively new, along with miscellaneous metal and other trash pieces. The site consists of a grove of eucalyptus (*Eucalyptus* sp.) and the non-native Australian pine (*Casuarina equisetifolia*) in the southwestern portion of the site, but is largely composed of annual grassland habitat. No native tree species were identified. The area that was previously mapped as seasonal wetland habitat in the wetland delineation (ECORP, 2003) was inundated due to the recent heavy rainfall occurrences in the area. Several dirt mounds that have been overgrown with grasses were observed in the northeast and southwest corners of the property. Wildlife observed on-site during the site visit were limited to bird species and include American robin (*Turdus migratorius*), mourning dove (*Zenaidura macroura*), yellow-billed magpie (*Pica nuttalli*), and northern flicker (*Colaptes auratus*). A turkey vulture (*Cathartes aura*) was observed foraging within the area as well. An average sized nest was located in a eucalyptus tree located near the southwestern border of the site. A yellow-billed magpie and northern flicker were observed within the vicinity of the nest, but no birds were observed actively using the nest. No special-status animal or plant species were observed.

The on-site trees and annual grasslands provide potentially suitable nesting and foraging habitat for regionally occurring special-status bird species including white tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), Swainson's hawk (*Buteo swainsoni*), burrowing owl (*Athene cunicularia*), and loggerhead shrike (*Lanius ludovicianus*). No other habitat for special-status species was observed on-site. Recommendations include conducting a pre-construction survey by a qualified biologist for nesting raptors and other birds protected by the Migratory Bird Treaty

Act no more than 30 days prior to commencing grading or earthmoving activities on the project site. If nesting birds are found, the California Department of Fish and Game or Placer County will determine the appropriate measures to take, avoid, or mitigate for adverse impacts to these nesting birds. Additionally, the conversion of Swainson's hawk foraging habitat may be considered a significant impact that would require mitigation, since active Swainson's hawk nests are recorded on the California Natural Diversity Database (CNDDB) within five miles of the project site (California Department of Fish and Game, CNDDB dated August 2, 2004).



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May 9, 2003

Mr. Bill Brown  
Towne Development of Sacramento, Inc.  
775 Sunrise Avenue, Suite 270  
Roseville, CA 95661

***RE: Whispering Creek, Placer County, California – Rare Plant Survey***

Dear Mr. Brown:

I conducted a rare plant survey on May 7, 2003 for the Whispering Creek project site located in western Placer County, California. The Whispering Creek property is a 36-acre undeveloped parcel within unincorporated western Placer County, west of Cook-Ricco Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes that front Meandering Way, on the west by undeveloped lands and rural residences, on the north by PFE Road, and on the east by Oly Lane and rural residences. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey) (Figure 1).

The survey was conducted during the optimum blooming period for Sanford's arrowhead, which is the only potentially occurring special-status plant on-site. The purpose of the surveys was to document the presence of special-status plant species with federal and/or state listing (under the federal Endangered Species Act or California Endangered Species Act respectively), and plants listed by the California Native Plant Society (CNPS) that meet the definition of a rare, threatened or endangered plant. California listed species are subject to the Native Plant Protection Act (Section 1901, Chapter 10 of the California Fish and Game Code) and the California Endangered Species Act (Section 2062 and 2067 of the California Fish and Game Code). These plant species are also subject to full consideration under the California Environmental Quality Act.

**SITE DESCRIPTION**

Whispering Creek is currently comprised of non-native annual grassland, willow scrub riparian habitat, and ephemeral drainages and swales. The site topography is gently rolling, and is situated at an elevation of approximately 120

feet above mean sea level. The non-native annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and sticky tarweed (*Holocarpha virgata*).

The riparian willow scrub vegetation community is present in association with a seasonal wetland drainage that receives runoff from the adjacent housing subdivision to the south. The riparian vegetation is comprised primarily of willow species (*Salix* spp.) and Fremont cottonwood (*Populus fremontii*), with scattered Himalaya blackberry (*Rubus discolor*) and Valley oak (*Quercus lobata*). Understory vegetation is made up of a mixture of upland and wetland plants such as bull thistle (*Cirsium vulgare*), South American vervain (*Verbena bonariensis*), dallisgrass (*Paspalum dilatatum*), annual rabbit-foot grass (*Polypogon monspeliensis*), and ryegrass.

One soil unit has been mapped for the entire site, (147) Fiddymment-Kaseberg loams, 2 to 9 percent slopes (USDA, NRCS 1980).

## METHODS

A list of special-status plants with potential to occur on the project site was generated using the *California Department of Fish and Game Natural Diversity Data Base Special Status Plants List* (California Department of Fish and Game 2002) and the *Inventory of Rare and Endangered Vascular Plants of California, Sixth Edition* (California Native Plant Society 2001). Species with potential to occur include Sanford's arrowhead (*Sagittaria sanfordii*), a federal species of concern and CNPS List 1B species. Plant species found during the survey were identified using *The Jepson Manual, Higher Plants of California* (Hickman, 1993). The survey was conducted by walking transects through the appropriate habitat features depicted on the wetland delineation map (Figure 2).

## RESULTS

During the surveys, a complete list of species encountered was generated and is presented in Table 1. No special-status plant species were observed on-site during the surveys. The ephemeral drainage that flows from the southeast to the northwest corner of the site represents the area targeted for the potentially occurring Sanford's arrowhead. During the survey, the drainage was partially inundated due to runoff into a storm drain outfall resulting from recent rain events. Plants observed within the drainage include common hydrophytes such

as tall flatsedge (*Cyperus eragrostis*), lady's thumb (*Polygonum persicaria*), dotted smartweed (*P. punctatum*), broad-leaf cattail (*Typha latifolia*), and water speedwell (*Veronica anagallis-aquatica*).

## CONCLUSION

In summary, a rare plant survey targeting Sanford's arrowhead conducted during May 2003 identified no special-status plants on-site.

If you have any questions regarding the findings of our special status plant species investigation, please call me at 916-782-9100.

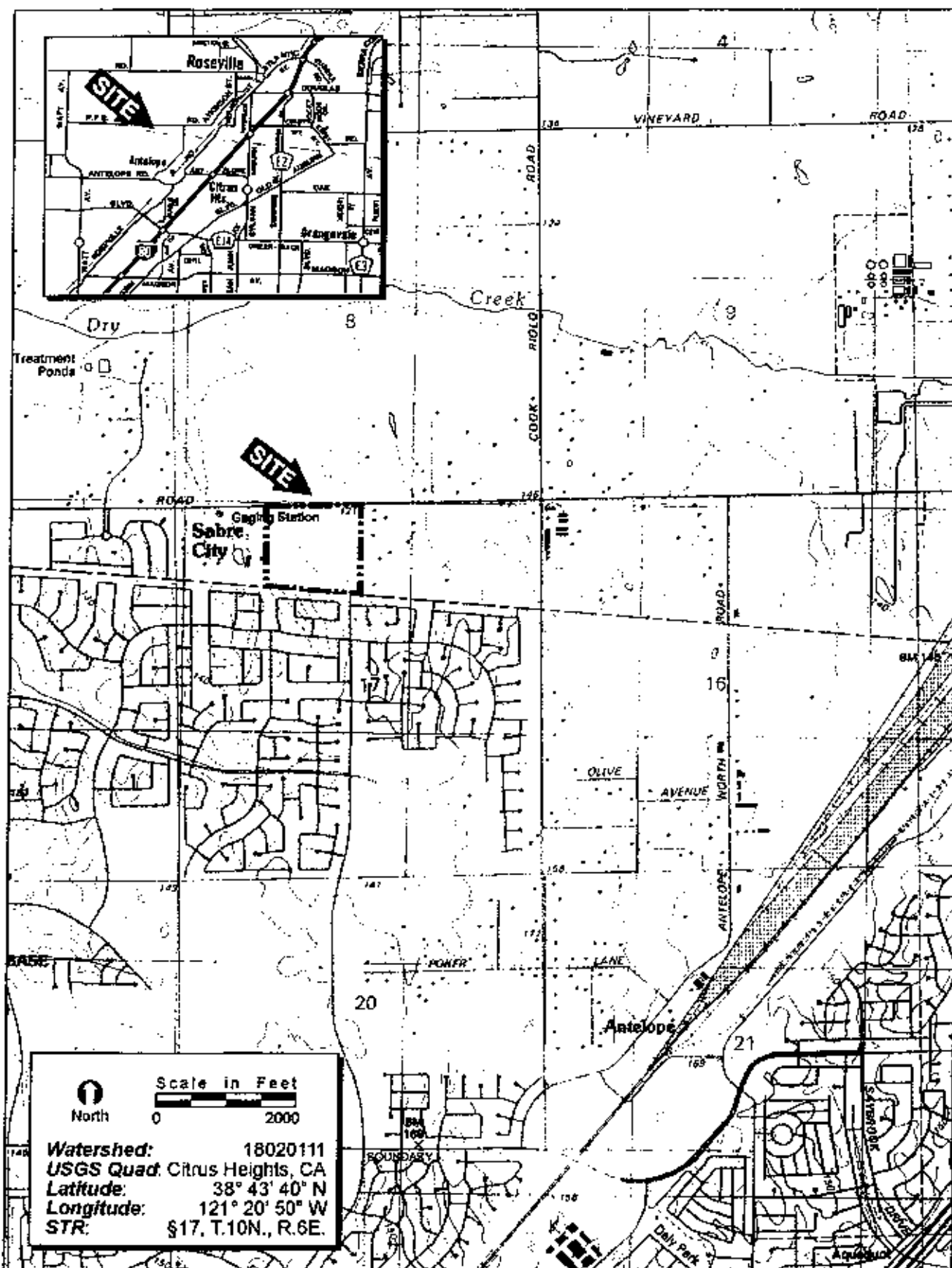
Sincerely,



Keith C. Kwan  
Senior Biologist

Enclosures

cc: Mr. Jack Coulter / County Builder, LLC



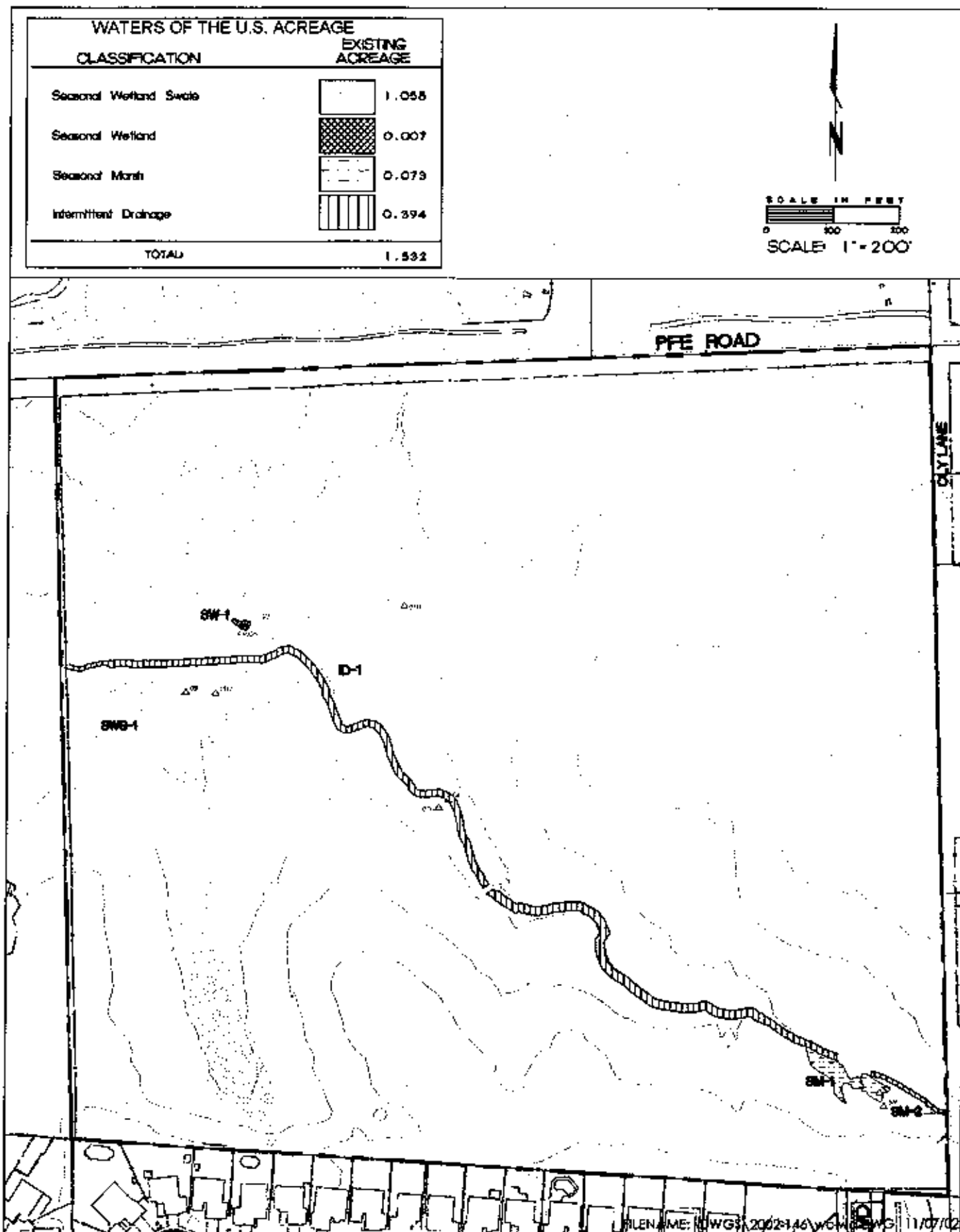


FIGURE 2. Wetland Delineation



Table 1. Plants Observed On-Site (May 7, 2003)

Scientific Name	Common Name	Scientific Name	Common Name
<i>Achyrochaena mollis</i>	Blowwives	<i>Trifolium hirtum</i>	Rose clover
<i>Aira caryophyllea</i>	Hairgrass	<i>Triphysaria eriantha</i>	Butter and eggs
<i>Avena fatua</i>	Wild oat	<i>Typha latifolia</i>	Broad-leaf cattail
<i>Briza minor</i>	Little quaking grass	<i>Verbena bonariensis</i>	South American vervain
<i>Bromus diandrus</i>	Ripgut brome	<i>Veronica anagallis-aquatica</i>	Water speedwell
<i>Bromus hordeaceus</i>	Soft brome	<i>Vicia villosa</i>	Winter vetch
<i>Castilleja attenuata</i>	Valley tassels	<i>Vulpia bromoides</i>	Vulpia
<i>Centaurea solstitialis</i>	Yellow star thistle		
<i>Cerastium glomeratum</i>	Mouse-ear chickweed		
<i>Chamomilla suaveolens</i>	Pineapple weed		
<i>Cirsium vulgare</i>	Bull thistle		
<i>Cortaderia species</i>	Pampas grass		
<i>Cyperus eragrostis</i>	Tall flatsedge		
<i>Downingia ornatissima</i>	Solano downingia		
<i>Eleocharis macrostachya</i>	Creeping spikerush		
<i>Epilobium brachycarpum</i>	Panicled willow-herb		
<i>Epilobium ciliatum</i>	Hairy willow-herb		
<i>Erodium botrys</i>	Filaree		
<i>Eucalyptus globulus</i>	Blue gum		
<i>Ficus carica</i>	Fig		
<i>Galium species</i>	Bedstraw		
<i>Holocarpha virgata</i>	Sticky tarweed		
<i>Hordeum marinum</i>	Mediterranean barley		
<i>Hordeum murinum</i>	Barley		
<i>Hypochaeris glabra</i>	Smooth cat's-ear		
<i>Juncus bufonius</i>	Toad rush		
<i>Lactuca serriola</i>	Prickly lettuce		
<i>Leontodon taraxacoides</i>	Hairy hawkbit		
<i>Limnanthus alba</i>	White meadowfoam		
<i>Lolium multiflorum</i>	Ryegrass		
<i>Medicago polymorpha</i>	Bur clover		
<i>Paspalum dilatatum</i>	Dallisgrass		
<i>Picris echioides</i>	Bristly oxtongue		
<i>Polygonum persicaria</i>	Lady's thumb		
<i>Polygonum punctatum</i>	Dotted smartweed		
<i>Polypogon monspeliensis</i>	Annual rabbit-foot grass		
<i>Populus fremontii</i>	Fremont's cottonwood		
<i>Quercus lobata</i>	Valley oak		
<i>Ranunculus bonariensis</i>	Carter's buttercup		
<i>Ranunculus muricatus</i>	Spiny-fruit buttercup		
<i>Rumex conglomeratus</i>	Clustered dock		
<i>Salix babylonica</i>	Weeping willow		
<i>Salix exigua</i>	Sandbar willow		
<i>Salix gooddingii</i>	Goodding's black willow		
<i>Salix lasiolepis</i>	Arroyo willow		
<i>Sonchus asper</i>	Prickly sowthistle		
<i>Taeniatherum caput-medusae</i>	Medusahead grass		
<i>Trifolium fucatum</i>	Sour clover		

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VALLEY ELDERBERRY LONGHORN BEETLE HABITAT SURVEY

FOR

**ALMOND RANCH**

PLACER COUNTY, CALIFORNIA

September 18, 2003



*Prepared for:*  
**COUNTY BUILDER, LLC**

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



## CONTENTS

### ALMOND RANCH

#### VALLEY ELDERBERRY LONGHORN BEETLE HABITAT SURVEY

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4.1 General Habitat Characterization.....	3
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Figure 1 – Project Site and Vicinity Map



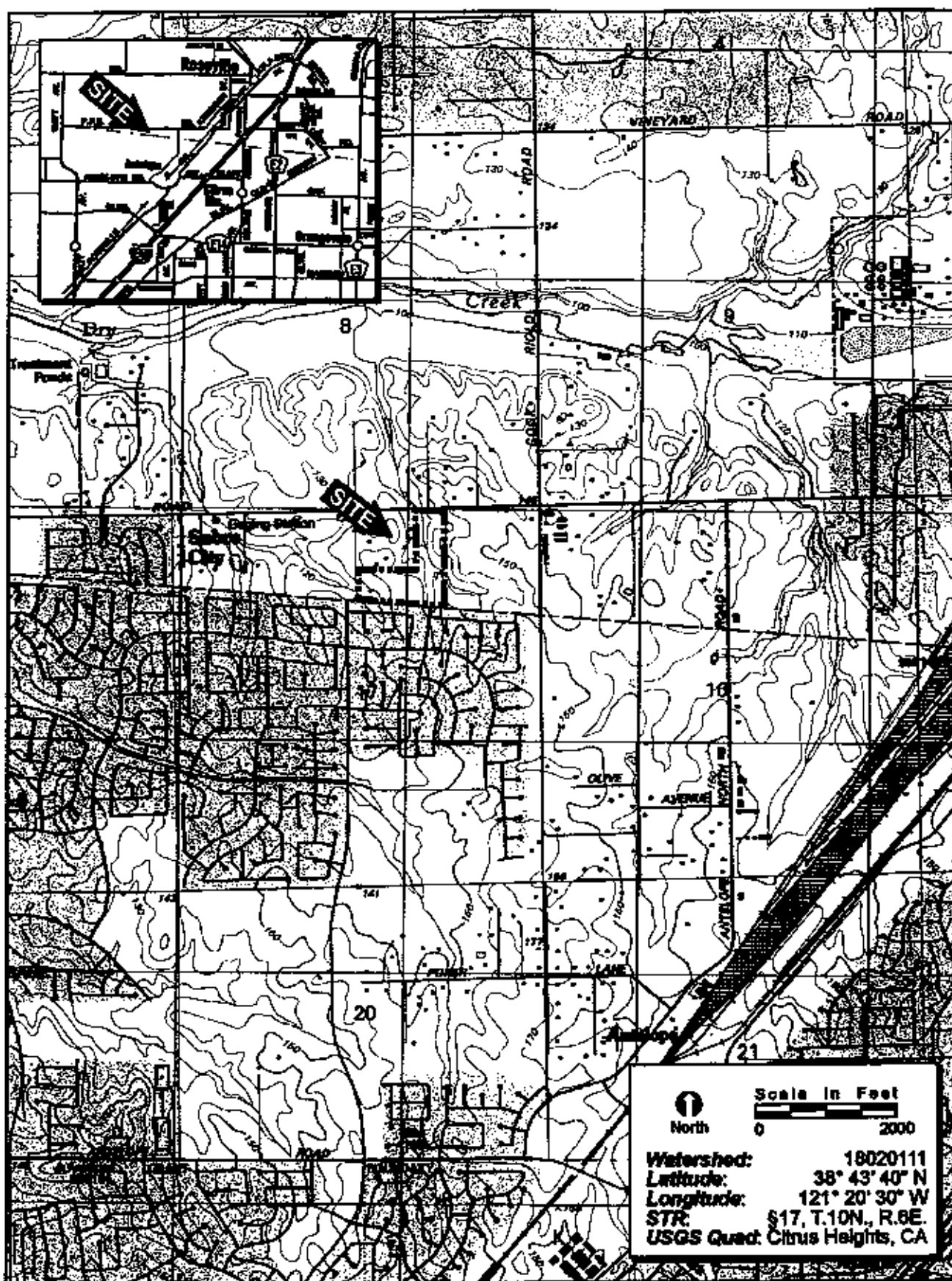
## **1.0 INTRODUCTION**

On behalf of the County Builder, LLC, ECORP Consulting, Inc., has conducted a Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) habitat survey at the 26-acre Almond Ranch project located in Placer County, California.

The subject property is located west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes fronting Elgin Hills Way, on the east and west by undeveloped lands and rural residences, and on the north by PFE Road. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey 1992) (Figure 1).

## **2.0 VALLEY ELDERBERRY LONGHORN BEETLE - BACKGROUND**

The Valley elderberry longhorn beetle (Family: Cerambycidae) is associated with live elderberry (*Sambucus* sp.) shrubs, its exclusive host plant. Life history aspects of the beetle are assumed to follow a sequence of events similar to that of related taxa (USFWS 1984). Adult Valley elderberry longhorn beetles, which are generally short-lived, typically emerge from elderberry shrubs in May, but have been encountered during March through June. After mating, females deposit eggs in crevices on the bark of living elderberry plants. Upon hatching, the larvae bore into the pith of the elderberry, where they remain for one to two years. Following pupation, adult beetles emerge from the elderberry through created emergence holes, which are circular or somewhat oval in shape. Emergence holes are indicative of habitat use, although all elderberry shrubs within the range of the species, whether or not the shrubs reveal emergence holes, represent potentially occupied habitat.



In 1978, the U.S. Fish and Wildlife Service proposed that the Valley elderberry longhorn beetle be listed as a "threatened" species under the federal Endangered Species Act of 1973, as amended. In 1980, it was officially listed as a threatened species (Federal Register 45: 52803-52807).

Elderberry shrubs are deciduous plants, dropping all leaves in fall and winter. Due to their lack of leaves during fall and winter months, dormant elderberry shrubs are not as conspicuous as during spring and summer. Elderberry shrubs are typically readily identifiable during their dormant stage by their unique structure and appearance (i.e. multi-stem shrub habit, branching structure, and leaf scars), and during their leafy phase by their bright green, pinnately compound leaves.

### **3.0 SURVEY METHODS**

On September 17, 2003, a survey for the Valley elderberry longhorn beetle (VELB) and its obligate habitat, the elderberry shrub (*Sambucus mexicanus*), was conducted. The field survey was conducted in order to identify, map, and catalogue all potential Valley elderberry longhorn beetle habitat (i.e., elderberry shrubs) present. ECORP biologist, Reed Hentze, surveyed the entire property in search of elderberry shrubs and trees. All accessible areas of the site were walked. Meandering transects through areas of dense vegetation were walked in an attempt to identify potentially occurring shrubs.

### **4.0 SURVEY RESULTS**

#### **4.1 General Habitat Characterization**

The Almond Ranch site is comprised of abandoned orchard to the east, and a horse pasture to the west along with two rural residences and associated outbuildings. The habitat on-site consists of non-native annual grassland. The site has gently rolling topography, and is situated

at an elevation of approximately 140 feet above mean sea level. The orchard, which does not appear to be in active production or harvest, is made up of primarily almond (*Prunus dulcis*) trees. The non-native annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and sticky tarweed (*Holocarpha virgata*). Other scattered trees on-site include blue gum (*Eucalyptus globulus*) and blue oak (*Quercus douglasii*).

#### **4.2 Elderberry Survey**

No elderberry shrubs were identified during the Valley elderberry longhorn beetle habitat survey conducted at the Almond Ranch project site.



## 5.0 REFERENCES

- Barr, C.B. 1991. *The Distribution, Habitat, and Status of the Valley Elderberry Longhorn Beetle *Desmocerus Californicus Dimorphus**. U.S. Fish and Wildlife Service; Sacramento, California.
- USFWS. 1980. *Listing the Valley Elderberry Longhorn Beetle as a Threatened Species With Critical Habitat*. Federal Register 45:52803-52807.
- USFWS. 1984. *Recovery Plan for the Valley Elderberry Longhorn Beetle*. U.S. Fish and Wildlife Service, Endangered Species Program; Portland, Oregon.
- USFWS. 1996. *Mitigation Guidelines for the Valley Elderberry Longhorn Beetle*. U.S. Fish and Wildlife Service, Sacramento Field Office, September 19, 1996.



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WETLAND DELINEATION  
FOR  
**WHISPERING CREEK**  
PLACER COUNTY, CALIFORNIA

November 27, 2002

*Prepared for:*  
TOWNE REALTY, INC.



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



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## WHISPERING CREEK

## WETLAND DELINEATION

Introduction.....	1
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Figure 1 – Project Site and Vicinity Map

Figure 2 – Wetland Delineation

### APPENDICES

Appendix A – Wetland Delineation Data Sheets

Appendix B – Plant List

Appendix C – Wetland Delineation





## INTRODUCTION

On behalf of Towne Realty, Inc., ECORP Consulting, Inc. has conducted a wetland delineation of the proposed Whispering Creek development site located in unincorporated western Placer County, California. Whispering Creek is a 36-acre undeveloped parcel west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes fronting Meandering Way, on the west by undeveloped lands and rural residences, on the north by PFE Road, and on the east by Oly Lane and rural residences. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey 1992) (Figure 1).

### APPLICANT:

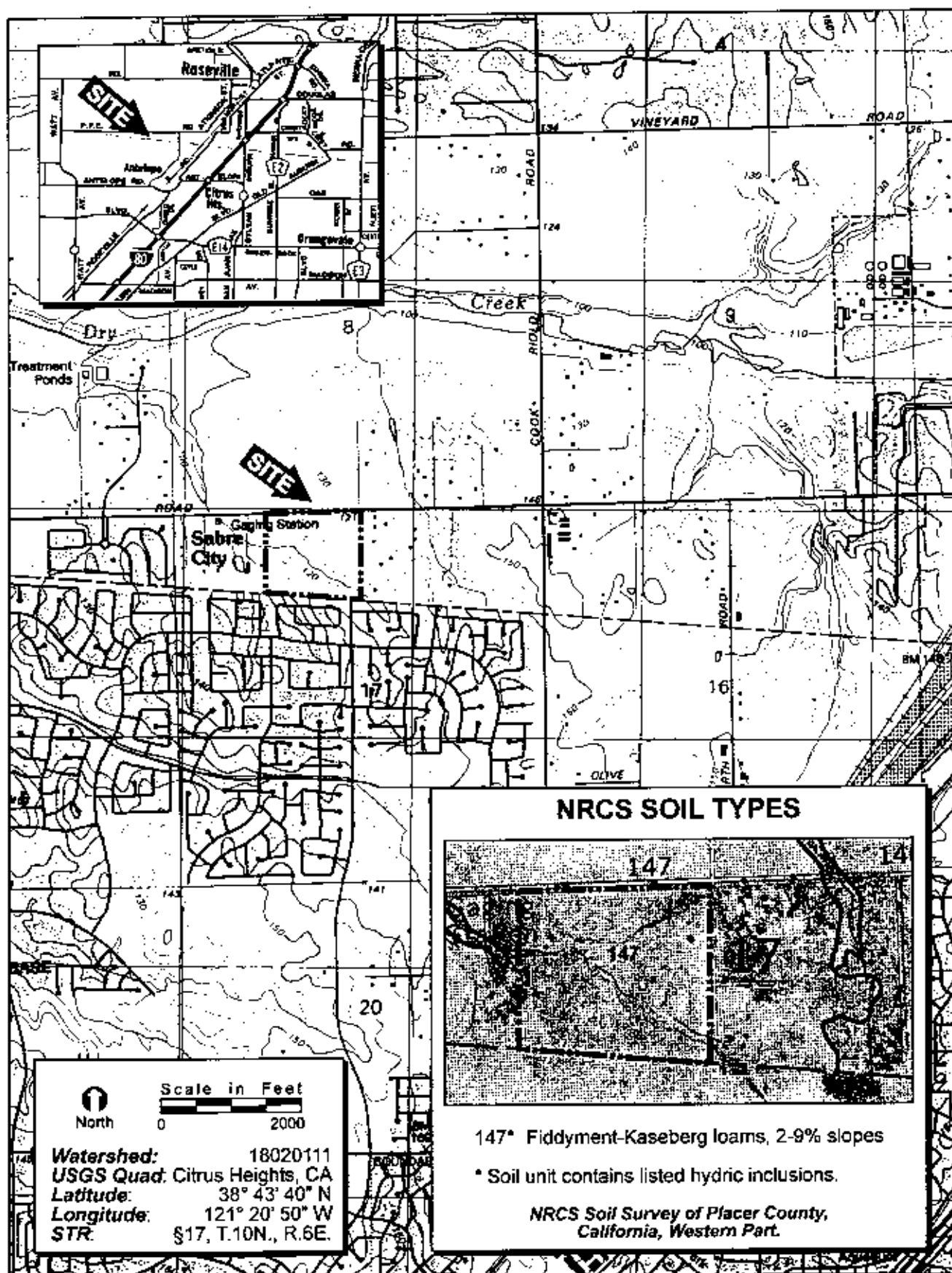
Attn: Mr. Bill Brown  
Towne Realty Inc.  
775 Sunrise Ave., Suite 270  
Roseville, California 95661  
Phone: (916) 782-2424  
Fax: (916) 782-2666

### AGENT:

Attn: Mr. Keith Kwan  
ECORP Consulting, Inc.  
2260 Douglas Blvd., Suite 160  
Roseville, California 95661  
Phone: (916) 782-9100  
Fax: (916) 782-9134

## SURVEY METHODOLOGY

The wetland delineation was conducted on October 24, 2002, during which time, biologist Keith Kwan walked and inspected the entire site to determine the extent of potential waters of the U.S. within the project site. This wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Wetland boundaries and a number of three parameter data points were mapped and their Global Positioning System (GPS) coordinates were logged and recorded with a Trimble PROXR unit. A black and white aerial photograph (1"=100', flown on April 4, 2000) was utilized to assist with mapping and ground-truthing. A *Munsell Soil Color Chart* (Kollmorgen Instruments Corp. 1990) was used to identify hydric soils in the field, and the *Jepson Manual* (Hickman 1994) was used for plant identification.



**FIGURE 1. Project Site and Vicinity Map**

2002-146 Whispering Creek

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS  
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The survey was conducted at the end of the growing season and many plant species had flowered, and most annual species had already declined.

## **EXISTING SITE CONDITIONS**

The Whispering Creek site is currently comprised of non-native annual grassland, willow scrub riparian habitat, and ephemeral drainages and swales. The site topography is gently rolling, and is situated at an elevation of approximately 120 feet above mean sea level. The non-native annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and sticky tarweed (*Holocarpha virgata*).

The riparian willow scrub vegetation community is present in association with a seasonal wetland drainage that receives runoff from the adjacent housing subdivision to the south. The riparian vegetation is comprised primarily of willow species (*Salix* spp.) and Fremont cottonwood (*Populus fremontii*), with scattered Himalaya blackberry (*Rubus discolor*) and Valley oak (*Quercus lobata*). Understory vegetation is made up of a mixture of upland and wetland plants such as bull thistle (*Cirsium vulgare*), South American vervain (*Verbena bonariensis*), dallisgrass (*Paspalum dilatatum*), annual rabbit-foot grass (*Polypogon monspeliensis*), and ryegrass.

One soil unit has been mapped for the entire site, (147) Fiddymment-Kaseberg loams, 2 to 9 percent slopes (U.S. Department of Agriculture, Soil Conservation Service 1980).

## **WATERS OF THE U.S.**

Potentially jurisdictional waters of the U. S. mapped total 1.532 acres and include wetlands (1.138 acres) and other waters. Wetlands consist of seasonal wetland (0.007 acre), wetland swale (1.058 acres), and seasonal marsh (0.073 acre), and other waters are comprised of an intermittent drainage (0.394 acre). Three parameter wetland delineation data sheets have

been included as Appendix A, and a list of plant species observed at the data collection points is included as Appendix B. The wetland delineation is presented as Figure 2 and in Appendix C.

## **Wetlands**

Seasonal wetlands are ephemeral wet areas where runoff accumulates within low-lying areas and/or adjacent to watercourses. These may occur as basins or linear features. Linear features are typically referred to as seasonal wetland swales. The vegetative composition of the seasonal wetland on-site is comprised of non-native wetland generalist plants as well as native annual species. These include Bermuda grass (*Cynodon dactylon*), tall flatsedge (*Cyperus eragrostis*), ryegrass, hyssop loosestrife (*Lythrum hyssopifolium*), and slender popcorn flower (*Plagiobothrys stipitatus*).

The wetland swale is comprised of riparian woody vegetation and an understory of herbaceous hydrophytic plants. The wetland may be characterized as seasonal, but is largely dependent upon runoff from the subdivision to the north of the site. Consequently, during periods of excessive runoff from landscape irrigation, this wetland swale becomes saturated and inundated in the lower lying areas. This may occur during any season through the year. The riparian canopy is comprised of Goodding's black willow (*Salix gooddingii*) and Fremont cottonwood. Herbaceous vegetation within the swale includes tall flatsedge, clustered dock (*Rumex conglomeratus*), curly dock (*R. crispus*), and cattail (*Typha* spp.).

The seasonal marsh within the eastern portion of the site is situated within and adjacent to a naturally occurring topographic swale and may also receive additional intermittent runoff from Don Julio Boulevard, which is located immediately to the south. Plants within the marsh are typical seasonal wetland and moist soil species such as annual rabbit-foot grass (*Polypogon monspeliensis*), Bermuda grass, tall flatsedge, soft rush (*Juncus effusus*), hairy willow-herb (*Epilobium ciliatum*), and prostrate knotweed (*Polygonum arenastrum*).

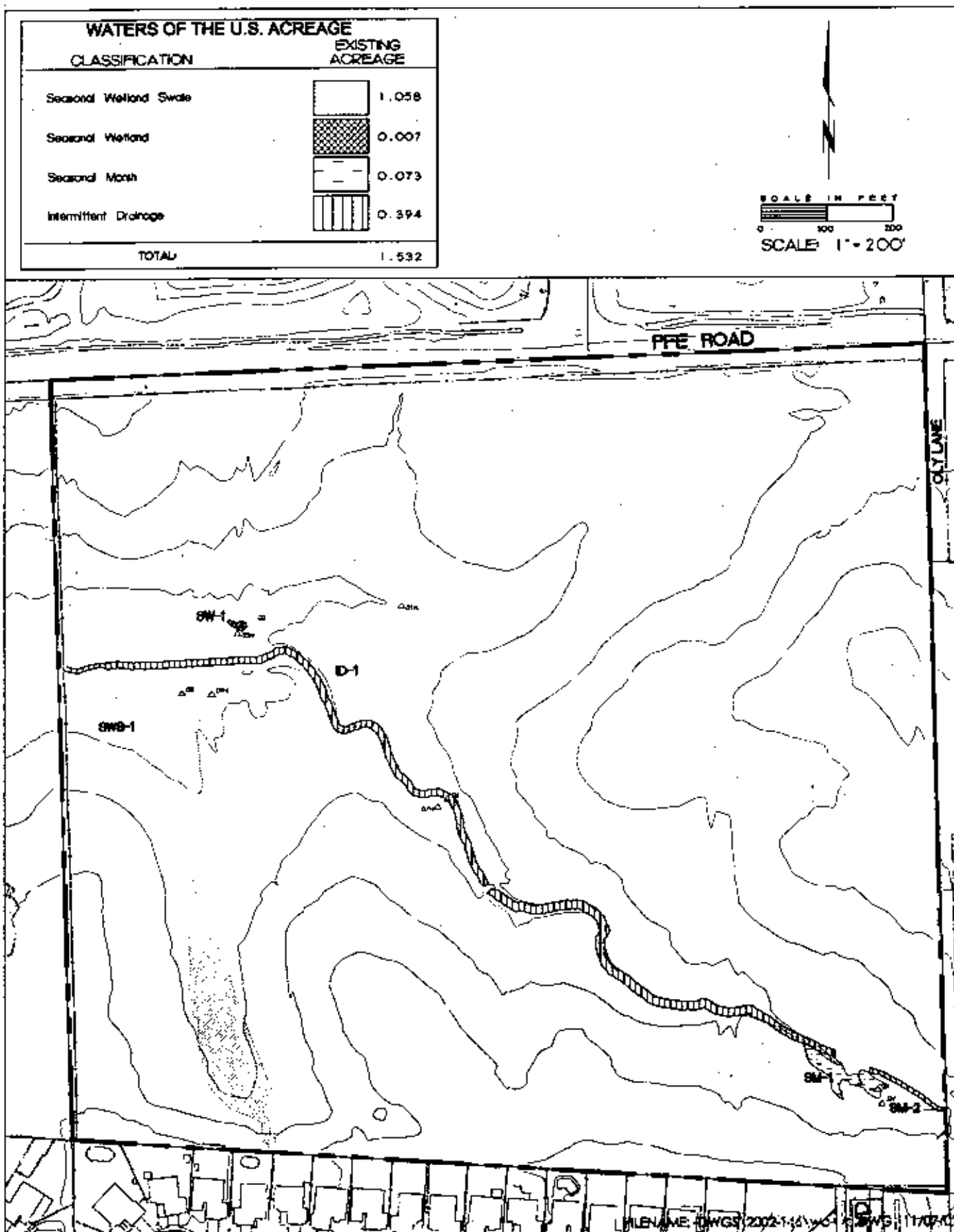


FIGURE 2. Wetland Delineation

2002-146 Whispering Creek

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ENVIRONMENTAL CONSULTANTS

## **Other Waters**

An intermittent drainage provides the primary drainage through the entire site. The drainage ranges from 6 to 15 feet wide (top of bank to top of bank) and approximately 1 to 4 feet deep (top of bank to bed). The flows are intermittent through the wet season and augmented by urban runoff and possibly ground water during the drier portions of the year. Vegetation is absent in reaches where flows are too high and suitable soil does not exist, while vegetative cover is persistent in reaches where sediment accumulation allows for growth within a relative unstable environment. The plant species observed within the drainage include typical wetland and moist soil species such as broad-leaf cattail (*Typha latifolia*), lady's thumb (*Polygonum persicaria*), annual rabbit-foot grass (*Polypogon monspeliensis*), and hairy willow-herb (*Epilobium ciliatum*).

## **INTERSTATE OR FOREIGN COMMERCE**

The wetlands mapped on-site are within the Dry Creek watershed. Dry Creek is located several hundred yards to the north of the site. Due to the rolling topography of the site, overland flows of rainwater accumulate within the on-site wetland features, and during the wet season, water levels increase and eventually spill into larger drainages on-site and off-site. These flows ultimately reach Dry Creek. Dry Creek eventually flows into the Sacramento River, which is navigable water. Thus, these waters should be considered tributary and/or adjacent to a documented Water of a U.S. and would therefore be subject to interstate and/or foreign commerce.

## **CONCLUSION**

Potentially jurisdictional waters of the U. S. mapped on-site total 1.532 acres and include wetlands (1.138 acres) and other waters. Wetlands consist of seasonal wetland (0.007 acre), wetland swale (1.058 acres), and seasonal marsh (0.073 acre), and other waters are comprised of an intermittent drainage (0.394 acre). Any impact to these features would likely require permitting pursuant to Section 404 and 401 of the federal Clean Water Act.

## REFERENCES

- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U. S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Hickman, James C. *ed.* 1993. The Jepson Manual, Higher Plants of California, University of California Press, Berkeley, California.
- Kollmorgen Instruments Corp. 1990. Munsell Soil Color Charts. MacBeth Division of Kollmorgen Instruments Corporation. Baltimore, Maryland.
- U.S. Department of Agriculture, Soil Conservation Service. 1980. Soil Survey of Placer County Western Part, California. U.S. Department of Agriculture, Soil Conservation Service, Davis, California.
- U.S. Department of the Interior, Geological Survey. 1992. "Citrus Heights, California" 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

## **LIST OF APPENDICES**

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Appendix A. Wetland Delineation Data Sheets

Appendix B. Plant List

Appendix C. Wetland Delineation



## APPENDIX A

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### Wetland Delineation Data Sheets



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 01  
Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
County: Placer State: CA Plant Community: Annual Grassland  
Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
Is this a potential Problem Area? Yes ☒ No ☐ Explain: ephemeral surface

### • VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Lotus</u>	<u>FAC</u>	<u>herb</u>	<u>38</u>	5) _____	_____	_____	_____
2) <u>Tar cup</u>	<u>N/C</u>	<u>herb</u>	<u>33</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 1/2 = 50 %

Comments: \_\_\_\_\_

### • HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
Secondary Indicators (2 or more required):  
☒ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
Comments: very shallow surface

### • SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymant-Karsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
Taxonomy (Subgroup): fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>	_____	<u>10YR2/2</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: high chroma; ex rhizosphere present but no mottles

### • DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: does not meet criteria

General comments: \_\_\_\_\_

Wetland Type: \_\_\_\_\_

## HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible]

COVER:

Vegetation 90

Bare Ground \_\_\_\_\_

Rocks \_\_\_\_\_

Other \_\_\_\_\_

TOTAL = 100%

<u>Species (Descending Order)</u>	<u>Relative Cover</u>	<u>Cumulative Cover</u>	<u>Indicator Status</u>	<u>Dominants</u>
TOTAL SUM ( $\Sigma$ ) =	100%			

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 02  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: seasonal pooling

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Cyn dca</u>	<u>FAC</u>	<u>herb</u>	<u>25</u>	5) _____	_____	_____	_____
2) <u>Cypera</u>	<u>FACW</u>	<u>herb</u>	<u>17</u>	6) _____	_____	_____	_____
3) <u>Lyt hys</u>	<u>FACW</u>	<u>herb</u>	<u>17</u>	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 7/3 = 100 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☒ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☒ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☒ Other algal mat  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddyment-Kaschberg loams, 2 to 7 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions (Series/Phase): Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-4</u>	_____	<u>10YR 4/3</u>	<u>-</u>	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: wetland based on plants and definitive hydrology

General comments: \_\_\_\_\_

Wetland Type: seasonal wetland

## HERBACEOUS COVER / DOMINANCE WORK SHEET

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
Cyn dact	15	25
Cyperus	10	17
Polygonum	5	8
Lys + Lys	10	17
Solanum	5	8
Platystichia	5	8
Rorippa	5	8
Polypodium	5	8
TOTAL SUM ( $\Sigma$ ) =	60	100%

<u>COVER:</u>	
Vegetation	<u>30</u>
Bare Ground	<u>        </u>
Rocks	<u>        </u>
Other <u>        </u>	<u>        </u>
TOTAL =	<u>100%</u>

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 03  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tussock</u>	<u>N/L</u>	<u>hmb.</u>	<u>35</u>	5) _____	_____	_____	_____
2) <u>Brodiaea</u>	<u>N/L</u>	<u>hmb</u>	<u>26</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 0/2 = 0 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymont-Katsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>	_____	<u>10YR 4/3</u>	<u>—</u>	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: \_\_\_\_\_

General comments: adjacent upland area to pt. 04

Wetland Type: \_\_\_\_\_

[illegible][illegible]

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## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 04  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: seasonal pooling

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Polygonum</u>	<u>FACW</u>	<u>herb</u>	<u>45</u>	5) <u>Epilobium</u>	<u>FACW</u>	<u>herb</u>	<u>9</u>
2) <u>Rumex</u>	<u>FACW</u>	<u>herb</u>	<u>9</u>	6) <u>Cynodon</u>	<u>FAC</u>	<u>herb</u>	<u>9</u>
3) <u>Cyperus</u>	<u>FACW</u>	<u>herb</u>	<u>9</u>	7) _____	_____	_____	_____
4) <u>Brachiaria</u>	<u>FACU</u>	<u>herb</u>	<u>9</u>	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 5/6 = 83 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☒ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☒ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymint-Kearney loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy (Subgroup): fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions (Series/Phase): Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>		<u>10YR 2/4</u>	<u>-</u>		

 Comments: fine sediments

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: determination based on hydrology and plant

General comments: \_\_\_\_\_

Wetland Type: Seasonal marsh

[illegible][illegible]

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## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/25/02 Sample Point: 05  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tall grass</u>	<u>n/c</u>	<u>herb</u>	<u>78</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 0% = 0 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymont-Karlsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: Fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Aband/Contrast/Size)	Texture, Concretions, Structure
<u>0-4</u>	_____	<u>10YR4/3</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

 Comments: high chroma

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: criteria have not been met  
 General comments: upland adjacent to plot

Wetland Type: \_\_\_\_\_

**HERBACEOUS COVER / DOMINANCE WORK SHEET**[illegible]

<b><u>COVER</u></b>	
Vegetation	100
Bare Ground	_____
Rocks	_____
Other _____	_____
<b>TOTAL =</b>	<b>100%</b>

[illegible]

**TOTAL SUM ( $\Sigma$ ) = 100%**

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 06  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Typ Int</u>	<u>Obl</u>	<u>herb</u>	<u>67</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 1/1 = 100 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☒ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymont-Karsberg loams, 2 to 7 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☒  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure

 Comments: no soil pt. color taken

### DECISION

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: determination based on hydrophytic plant dominances and wetl. hydrology  
 General comments: drainage with bed/bank  
 Wetland Type: Intermittent drainage

## HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible]

<u>COVER:</u>	
Vegetation	75
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 07  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tall grass</u>	<u>N/L</u>	<u>Herb</u>	<u>58</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 0/1 = 0 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: upland adjacent to 1st drainage

### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymont-Karsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-4</u>	_____	<u>10YR 4/3</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: high chroma

### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: in field not met  
 General comments: upland adjacent to 06  
 Wetland Type: \_\_\_\_\_

[illegible][illegible]

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## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 08  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: intermittent flows during dry season

#### • VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Cypera</u>	<u>FACW</u>	<u>herb</u>	<u>50</u>	5) _____	_____	_____	_____
2) <u>Rumex</u>	<u>FACW</u>	<u>herb</u>	<u>13</u>	6) _____	_____	_____	_____
3) <u>Salgo</u>	<u>FACW</u>	<u>Tree</u>	<u>13</u>	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 3/3 = 100 %

Comments: \_\_\_\_\_

#### • HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☒ Sediment Deposits ☒ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### • SOILS

HYDRIC SOILS? Yes ☒ No ☐

Series/Phase: 147 Fiddymint-Karsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☒  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☒ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>	_____	<u>10YR 4/3</u>	<u>10YR 5/6</u>	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

#### • DECISION

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: all criteria have been met

General comments: \_\_\_\_\_

Wetland Type: wetland 3 w/ 1 s

[illegible][illegible]

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# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 09  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### • VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tue cup</u>	<u>N/L</u>	<u>herb.</u>	<u>63</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 0% = 0 %

Comments: \_\_\_\_\_

#### • HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### • SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymant-Kasenberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-4</u>	_____	<u>10YR 4/3</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: high chroma

#### • DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: criteria have not been met  
 General comments: upland - adjacent to pt. 08  
 Wetland Type: \_\_\_\_\_

[illegible][illegible]

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## APPENDIX B

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Plant List



**Whispering Creek – Wetland Delineation  
Plants Observed at Data Points**

<b>Abbr.</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Indicator Status</b>
AVE FAT	<i>Avena fatua</i>	Wild oat	N/L
BRI MIN	<i>Briza minor</i>	Little quaking grass	FACU
BRO DIA	<i>Bromus diandrus</i>	Ripgut brome	N/L
BRO HOR	<i>Bromus hordeaceus</i>	Soft brome	FACU-
CIC INT	<i>Cichorium intybus</i>	Chicory	NI
CYN DAC	<i>Cynodon dactylon</i>	Bermuda grass	FAC
CYP ERA	<i>Cyperus eragrostis</i>	Tall flatsedge	FACW
EPI CIL	<i>Epilobium ciliatum</i>	Hairy willow-herb	FACW
ERE SET	<i>Eremocarpus setigerus</i>	Turkey mullein	N/L
HOL VIR	<i>Holocarpha virgata</i>	Sticky tarweed	N/L
JUN EFF	<i>Juncus effusus</i>	Soft rush	OBL
LAC SER	<i>Lactuca serriola</i>	Prickly lettuce	FAC
LOL MUL	<i>Lolium multiflorum</i>	Ryegrass	FAC*
LYT HYS	<i>Lythrum hyssopifolium</i>	Hyssop loosestrife	FACW
PLA STI	<i>Plagiobothrys stipitatus</i>	Slender popcorn-flower	OBL
POL ARE	<i>Polygonum arenastrum</i>	Prostrate knotweed	FAC
POL PER	<i>Polygonum persicaria</i>	Lady's thumb	FACW
POL MON	<i>Polypogon monspeliensis</i>	Annual rabbit-foot grass	FACW+
POP FRE	<i>Populus fremontii</i>	Fremont's cottonwood	FAC+*
RUM CON	<i>Rumex conglomeratus</i>	Clustered dock	FACW
RUM CRI	<i>Rumex crispus</i>	Curly dock	FACW-
RUM PUL	<i>Rumex pulcher</i>	Fiddle dock	FAC+
SAL GOO	<i>Salix gooddingii</i>	Goodding's black willow	FACW
SON ASP	<i>Sonchus asper</i>	Prickly sowthistle	FACU
TAE CAP	<i>Taeniatherum caput-medusae</i>	Medusahead grass	N/L
TRI HIR	<i>Trifolium hirtum</i>	Rose clover	N/L
TYP LAT	<i>Typha latifolia</i>	Broad-leaf cattail	OBL
TYP spe.	<i>Typha species</i>	Cattail	OBL
VIC spe.	<i>Vicia species</i>	Vetch	--

**Indicator Status Codes**

**OBL** = Obligate Wetland; occur almost always (estimated probability >99%) under natural conditions in wetlands.

**FACW** = Facultative Wetland; usually occur in wetlands (estimated probability 67%-99%) under natural conditions in wetlands.

**FAC** = Facultative; equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).

**FACU** = Facultative Upland; usually occur in non-wetlands (estimated probability 67%-99%).

**OPL** = Obligate Upland; occur almost always (estimated probability >99%) in non-wetlands in the region specified.

**N/L** = Not Listed.

**NI** = No Indicator was recorded for those species for which insufficient information was available to determine a status.

-- = May or may not occur in wetlands depending upon species.

A positive (+) sign indicates a frequency toward the higher (more frequently found in wetlands) end of the facultative categories.

A negative (-) sign indicates a frequency toward the lower (less frequently found in wetlands) end of the facultative categories.

An asterisk (\*) indicates a tentative assignment based upon limited information or conflicting review.





## APPENDIX C

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Wetland Delineation

**NOT INCLUDED**



Insert color separator  
sheet here!



WETLAND DELINEATION  
FOR  
**PFE 14 PROPERTY**  
(PLACER COUNTY, CALIFORNIA)

March 14, 2003

Prepared for:  
**County Builders, LLC.**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



## CONTENTS

## WETLAND DELINEATION

PFE 14 PROPERTY

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Appendix B – Plant List

Appendix C – Wetland Delineation





## INTRODUCTION

On behalf of County Builders, LLC, ECORP Consulting, Inc. has conducted a wetland delineation of the PFE 14 site located in unincorporated western Placer County, California. PFE 14 is a 14-acre undeveloped parcel west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes fronting Elgin Hills Way, on the east and west by undeveloped lands and rural residences, and on the north by PFE Road. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey 1992) (Figure 1).

### APPLICANT:

Attn: Mr. Jack Coulter  
County Builders, LLC  
3050 Tilden Drive  
Roseville, California 95661-7942  
Phone: (916) 782-1640  
Fax: (916) 782-1810

### AGENT:

Attn: Mr. Keith Kwan  
ECORP Consulting, Inc.  
2260 Douglas Blvd., Suite 160  
Roseville, California 95661  
Phone: (916) 782-9100  
Fax: (916) 782-9134

## SURVEY METHODOLOGY

The wetland delineation was conducted on February 6, 2003, during which time, biologists Keith Kwan and Reed Hentze walked and inspected the entire site to determine the extent of potential waters of the U.S. within the project site. This wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Wetland boundaries and a number of three parameter data points were mapped and their Global Positioning System (GPS) coordinates were logged and recorded with a Trimble PROXR unit. A black and white aerial photograph (1"=100,' flown on April 4, 2000) was utilized to assist with mapping and ground-truthing. A *Munsell Soil Color Chart* (Kollmorgen Instruments Corp. 1990) was used to identify hydric soils in the field, and the *Jepson Manual* (Hickman 1994) was used for plant identification.

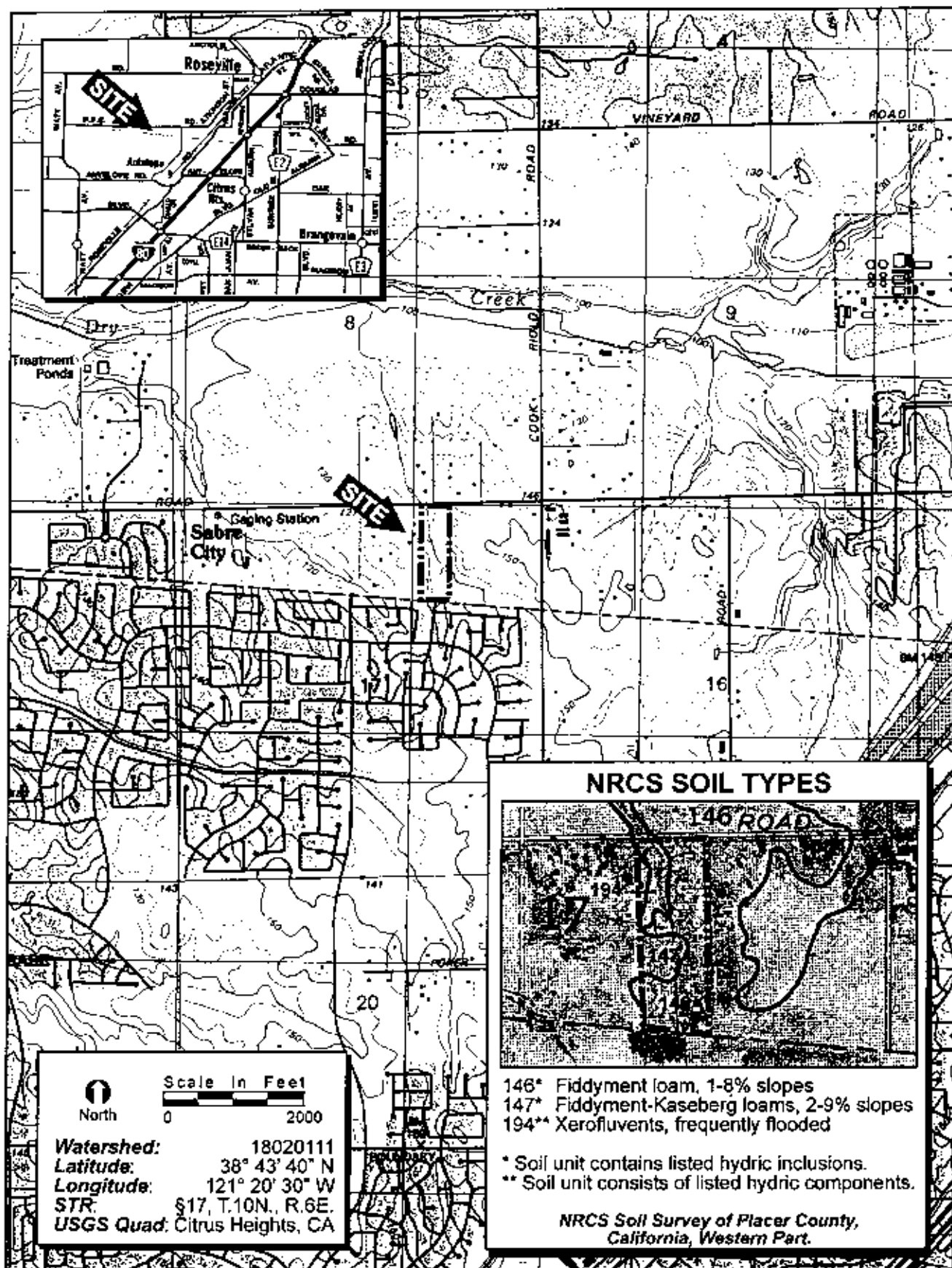


FIGURE 1. Project Site and Vicinity

The survey was conducted at the end of the growing season and many plant species had flowered, and most annual species had already declined.

## **EXISTING SITE CONDITIONS**

The PFE 14 site is currently comprised of abandoned orchard, non-native annual grassland with a wetland swale, and a rural residence with associated outbuildings. The site topography is gently rolling, and is situated at an elevation of approximately 140 feet above mean sea level. The orchard, which does not appear to be in active production or harvest, is made up of primarily almond (*Prunus dulcis*) trees. The non-native annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and sticky tarweed (*Holocarpha virgata*). Other scattered trees on-site include blue gum (*Eucalyptus globulus*) and blue oak (*Quercus douglasii*).

According to the *Soil Survey of Placer County, California, Western Part* three soil units have been mapped for the site, (146) Fiddymment loam, 1 to 8 percent slopes, (147) Fiddymment-Kaseberg loams, 2 to 9 percent slopes, and (194) Xerofluvents, frequently flooded (U.S. Department of Agriculture, Soil Conservation Service 1980).

## **WATERS OF THE U.S.**

Potentially jurisdictional waters of the U.S. mapped total 1.898 acres and are comprised of a seasonal wetland swale. Three parameter wetland delineation data sheets have been included as Appendix A, and a list of plant species observed at the data collection points is included as Appendix B. The wetland delineation is presented as Figure 2 and in Appendix C.

### **Wetlands**

The seasonal wetland swale is comprised of herbaceous hydrophytic plants with a few scattered black willows (*Salix gooddingii*). The wetland may be characterized as seasonal, but is largely



WATERS OF THE U.S. ACREAGE	
CLASSIFICATION	EXISTING ACREAGE
Second Wetland Grade	1.598
TOTAL	1.598

FILENAME: -OWGS\2002 225\ple-14-wd.DWG 12/13/02

FIGURE 2. Wetland Delineation

dependent upon storm water runoff from the subdivision south of the site. Consequently, during periods of excessive runoff from landscape irrigation, this wetland swale becomes saturated and inundated in the lower lying areas. This may occur during any season through the year. Herbaceous vegetation within the swale includes tall flatsedge (*Cyperus eragrostis*), spearmint (*Mentha spicata*), dallisgrass (*Paspalum dilatatum*), and curly dock (*Rumex crispus*).

The wetland swale flows in the south to north direction and is largely fed by a storm drain from the subdivision south of the PFE 14 site. The swale is well defined until it widens out within a topographically low-lying area within the abandoned orchard. Flows are directed into culverts on P.F.E. Road. Additional runoff into the swale comes from a stock pond outfall within the adjacent parcel east of the site.

## **INTERSTATE OR FOREIGN COMMERCE**

The wetlands mapped on-site are within the Dry Creek watershed. Dry Creek is located several hundred yards to the north of the site. Due to the rolling topography of the site, overland flows of rainwater accumulate within the on-site wetland swale, and during the wet season, water levels increase and eventually spill into larger drainages on-site and off-site. These flows ultimately reach Dry Creek. Dry Creek eventually flows into the Sacramento River, which is navigable water. Thus, these waters should be considered tributary and/or adjacent to a documented Water of a U.S. and would therefore be subject to interstate and/or foreign commerce.

## **CONCLUSION**

Potentially jurisdictional waters of the U.S. mapped total 1.898 acres and are comprised of a seasonal wetland swale. Upon verification of this wetland delineation by the Corps of Engineers, any impact to this feature would require permitting pursuant to Section 404 and 401 of the federal Clean Water Act.



## REFERENCES

- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
- Hickman, James C. *ed.* 1993. The Jepson Manual, Higher Plants of California, University of California Press, Berkeley, California.
- Kollmorgen Instruments Corp. 1990. Munsell Soil Color Charts. MacBeth Division of Kollmorgen Instruments Corporation. Baltimore, Maryland.
- U.S. Department of Agriculture, Soil Conservation Service. 1980. Soil Survey of Placer County Western Part, California. U.S. Department of Agriculture, Soil Conservation Service. Davis, California.
- U.S. Department of the Interior, Geological Survey. 1992. "Citrus Heights, California" 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

## **LIST OF APPENDICES**

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Appendix A. Wetland Delineation Data Sheets

Appendix B. Plant List

Appendix C. Wetland Delineation



## APPENDIX A

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### Wetland Delineation Data Sheets



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: PFE 14 Date: 2/6/03 Sample Point: 01  
 Applicant/Owner: County Builders LLC Field Investigator(s): K. Kwan / R. Heaton  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: seasonally inundated

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Lolium</u>	<u>Fac</u>	<u>herb</u>	<u>80</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 1/1 = 80 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: to surface (in.) Depth to saturated soil: to surface (in.)  
 Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetland  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: topographic swale

### SOILS

HYDRIC SOILS? Yes ☒ No ☐

Series/Phase: 146 Fiddymant loam, 1 to 8 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed/Low Chroma Colors ☐ Concretion  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusion (depression) On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>	_____	<u>10YR 3/1</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

### DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: all criteria have been met

General comments: \_\_\_\_\_

Wetland Type: wetland swale

## HERBACEOUS COVER / DOMINANCE WORK SHEET

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
Giant	40	80
Rare grass	5	10
Tall sp.	5	10
TOTAL SUM ( $\Sigma$ ) =	50	100%

COVER:

Vegetation	40
Bare Ground	
Rocks	
Other	
<b>TOTAL =</b>	<b>100%</b>

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: PFE 14 Date: 2/6/03 Sample Point: 02  
 Applicant/Owner: County Builders LLC Field Investigator(s): K. Kurzan / R. Hentze  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tar lup</u>	<u>N/L</u>	<u>Low</u>	<u>78</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-?]: 0/1 = 0 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 146 Fiddymont loam, 1 to 8 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-grained, mixed, thermic Typic Durixerolfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretion  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusion (depressions) On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-5</u>	_____	<u>7.5 YR 4/3</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

### DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: all criteria have not been met

General comments: upland area adjacent to wet swale

Wetland Type: \_\_\_\_\_

[illegible]

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# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: PFE 14 Date: 2/6/03 Sample Point: 03  
 Applicant/Owner: County Builders LLC Field Investigator(s): K. Kuran / R. Hunter  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: seasonal pooling

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Lolium</u>	<u>FAC</u>	<u>herb</u>	<u>24</u>	5) _____	_____	_____	_____
2) <u>Cynodon</u>	<u>FAC</u>	<u>herb</u>	<u>24</u>	6) _____	_____	_____	_____
3) <u>Cynodon</u>	<u>FAC</u>	<u>herb</u>	<u>19</u>	7) _____	_____	_____	_____
4) <u>Mesquite</u>	<u>FAC</u>	<u>herb</u>	<u>19</u>	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 4/4 = 100 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: to surface (in.)  
 Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetland:  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☒ No ☐

Series/Phase: 194 Xerofluvents, frequently flooded Drainage Class: poorly drained  
 Taxonomy [Subgroup]: Xerofluvents Thermic Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☒ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretion  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Xerofluvents component (drainage ways) On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-8</u>		<u>7.5YR 2/3/2</u>	<u>-</u>		

 Comments: \_\_\_\_\_

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: criteria have been met  
 General comments: strong on plants + hydrology override absence of  
hydric soil color Wetland Type: wetland swards

**HERBACEOUS COVER / DOMINANCE WORK SHEET**

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
Lol mult	25	24
Cyp era	20	19
Mn sp.	20	19
Cyn dac	25	24
Bum cr.	5	5
Pip mil	5	5
Pas det	5	5
TOTAL SUM ( $\Sigma$ ) =	105	100%

COVER:

Vegetation	100
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: PFE 14 Date: 2/6/03 Sample Point: 04  
 Applicant/Owner: County Builders LLC Field Investigator(s): K. Kwan / R. Hentze  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Taraxacum</u>	<u>N/L</u>	<u>Herb</u>	<u>86</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: \_\_\_\_\_ = \_\_\_\_\_ %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymant-Kaseberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretion  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusion (depressions) On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-8</u>	_____	<u>7.5YR/1.5</u>	<u>-</u>	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: high chroma

#### \* DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: all criteria have not been met

General comments: upland area adjacent to wetland swale

Wetland Type: \_\_\_\_\_

[illegible]

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# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: PFE 14 Date: 2/6/03 Sample Point: 05  
 Applicant/Owner: County Builders LLC Field Investigator(s): K Kwam / R Hester  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tarweed</u>	<u>N/C</u>	<u>herb</u>	<u>55</u>	5) _____	_____	_____	_____
2) <u>Buckwheat</u>	<u>FACW</u>	<u>herb</u>	<u>23</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 0/2 = 0 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_

Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_

Comments: see 1" & 2"

### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 146 Drainage Class: \_\_\_\_\_

Taxonomy [Subgroup]: \_\_\_\_\_ Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concrete

☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_

Inclusions [Series/Phase]: \_\_\_\_\_ On Hydric Soils List: Yes ☐ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-8</u>	_____	<u>10YR 4/7</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Comments: high chroma

### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: all criteria have not met

General comments: \_\_\_\_\_

Wetland Type: \_\_\_\_\_

[illegible]

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# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: PFE 14 Date: 2/6/03 Sample Point: 06  
 Applicant/Owner: County Builders LLC Field Investigator(s): K. Kusan / R. Hunt 20  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: seasonally inundated

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Lotus</u>	<u>Fac</u>	<u>herb</u>	<u>86</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): \_\_\_\_\_ = \_\_\_\_\_ %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetland  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☒ No ☐

Series/Phase: 14(6) Fiddymant loam 1 to 8 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: Fine-loamy, mixed, thermic Typic Duxianfr Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretion  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alumina inclusion (depression) On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
		<u>7.5YR2/2</u>	<u>7.5YR4/6</u>		

Comments: \_\_\_\_\_

#### \* DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: all criteria have been met

General comments: \_\_\_\_\_

Wetland Type: wetland soils

[illegible]

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# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: PFE 14 Date: 2/6/03 Sample Point: 07  
 Applicant/Owner: County Builders LLC Field Investigator(s): KL. Kwan / R. Huntze  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Lolium</u>	<u>FAC</u>	<u>herb</u>	<u>25</u>	5) _____	_____	_____	_____
2) <u>Aristida</u>	<u>n/c</u>	<u>herb</u>	<u>20</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 1/2 = 50 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: no 1° or 2° hydrologic indicators present

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 146 Fiddymant loam, 1 to 8 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed thermic Typic Durixerolfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretion  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusion (depressions) On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-8</u>	_____	<u>7.5YR 4/3</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: high chroma

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: all criteria have not been met  
 General comments: upland area adjacent to wetland soils  
 Wetland Type: \_\_\_\_\_

## HERBACEOUS COVER / DOMINANCE WORK SHEET

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
Leland	25	25
Arc. fct	20	20
Bra lvs	15	15
Vic spe	5	5
Hor mcr	10	10
Euc gla	25	25
TOTAL SUM ( $\Sigma$ ) =	100	100%

COVER:

Vegetation	90
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: PFE 14 Date: 2/6/03 Sample Point: 08  
 Applicant/Owner: County Builders LLC Field Investigator(s): K. Kwan / R. Hunt  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Lot annual</u>	<u>FAC</u>	<u>herb</u>	<u>50</u>	5) _____	_____	_____	_____
2) <u>Tar camp</u>	<u>N/C</u>	<u>herb</u>	<u>35</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 1/1 = 50 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_

Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland:

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_

Comments: very shallow swale; no 1° or 2° hydrologic indicators present

### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 142 Fiddymant Loam, 1 to 8 percent slopes Drainage Class: well drained

Taxonomy [Subgroup]: Fine loam, mixed, thermic Typic Durixeralf Confirm Map Type: Yes ☐ No ☒

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretion

☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_

Inclusions [Series/Phase]: Alamo inclusion (depressions) On Hydric Soils List: Yes ☒ No ☐

Depth (in.) Horizon Matrix Color Mottle Color Mottle (Abund/Contrast/Size) Texture, Concretions, Structure

0-12 7.5YR 4/2 - - - -

Comments: \_\_\_\_\_

### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: all criteria have not been met

General comments: \_\_\_\_\_

Wetland Type: \_\_\_\_\_

[illegible]

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## APPENDIX B

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Plant List



**P.F.E. 14 – Wetland Delineation  
Plants Observed at Data Points**

<b>Abbr.</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Indicator Status</b>
AVE FAT	<i>Avena fatua</i>	Wild oat	N/L
BRO HOR	<i>Bromus hordeaceus</i>	Soft brome	FACU-
CEN SOL	<i>Centaurea solstitialis</i>	Yellow star-thistle	N/L
CYN DAC	<i>Cynodon dactylon</i>	Bermuda grass	FAC
CYP ERA	<i>Cyperus eragrostis</i>	Tall flatsedge	FACW
EPI BRA	<i>Epilobium brachycarpum</i>	Panicked willow-herb	UPL
EUC GLO	<i>Eucalyptus globulus</i>	Blue gum	N/L
GER DIS	<i>Geranium dissectum</i>	Cut-leaved geranium	N/L
HOR MUR	<i>Hordeum murinum</i>	Barley	NI
LAC SER	<i>Lactuca serriola</i>	Prickly lettuce	FAC
LOL MUL	<i>Lolium multiflorum</i>	Ryegrass	FAC*
MEN SPI	<i>Mentha spicata</i>	Spearmint	OBL
PAS DIL	<i>Paspalum dilatatum</i>	Dallis grass	FAC
PIP MIL	<i>Piptotherum milliaceum</i>	Smilo grass	N/L
RAN BON	<i>Ranunculus bonariensis</i>	Carter's buttercup	OBL
RUM CRI	<i>Rumex crispus</i>	Curly dock	FACW-
TAE CAP	<i>Taeniatherum caput-medusae</i>	Medusahead grass	N/L
TRI spe.	<i>Trifolium species</i>	Clover	N/L
VIC spe.	<i>Vicia species</i>	Vetch	--

**Indicator Status Codes**

**OBL** = Obligate Wetland; occur almost always (estimated probability >99%) under natural conditions in wetlands.

**FACW** = Facultative Wetland; usually occur in wetlands (estimated probability 67%-99%) under natural conditions in wetlands.

**FAC** = Facultative; equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).

**FACU** = Facultative Upland; usually occur in non-wetlands (estimated probability 67%-99%).

**UPL** = Obligate Upland; occur almost always (estimated probability >99%) in non-wetlands in the region specified.

**N/L** = Not Listed.

**NI** = No indicator was recorded for those species for which insufficient information was available to determine a status.

-- = May or may not occur in wetlands depending upon species.

A positive (+) sign indicates a frequency toward the higher (more frequently found in wetlands) end of the facultative categories.

A negative (-) sign indicates a frequency toward the lower (less frequently found in wetlands) end of the facultative categories.

An asterisk (\*) indicates a tentative assignment based upon limited information or conflicting review.



## APPENDIX C

---

Wetland Delineation

NOT INCLUDED





Insert color separator  
sheet here.



WETLAND DELINEATION  
FOR  
**ALMOND RANCH**  
PLACER COUNTY, CALIFORNIA

**DRAFT**

September 24, 2003

*Prepared for:*



**County Builders, LLC**  
**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



## **WETLAND DELINEATION**

### **CONTENTS**

#### **ALMOND RANCH**

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### **LIST OF FIGURES**

Figure 1 – Project Site and Vicinity  
Figure 2 – Wetland Delineation

### **LIST OF ATTACHMENTS**

Attachment A – Wetland Delineation Data Sheets  
Attachment B – Plant List  
Attachment C – Wetland Delineation Map



## INTRODUCTION

On behalf of County Builders, LLC, ECORP Consulting, Inc. has conducted a wetland delineation for Almond Ranch, an additional parcel located south and west of the original PFE 14 site. This site is located in unincorporated western Placer County, California. Almond Ranch is a 12± acre undeveloped parcel west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes fronting Elgin Hills Way, on the east and west and north by undeveloped lands and rural residences. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey 1992) (Figure 1- *Project Site and Vicinity Map*).

### APPLICANT:

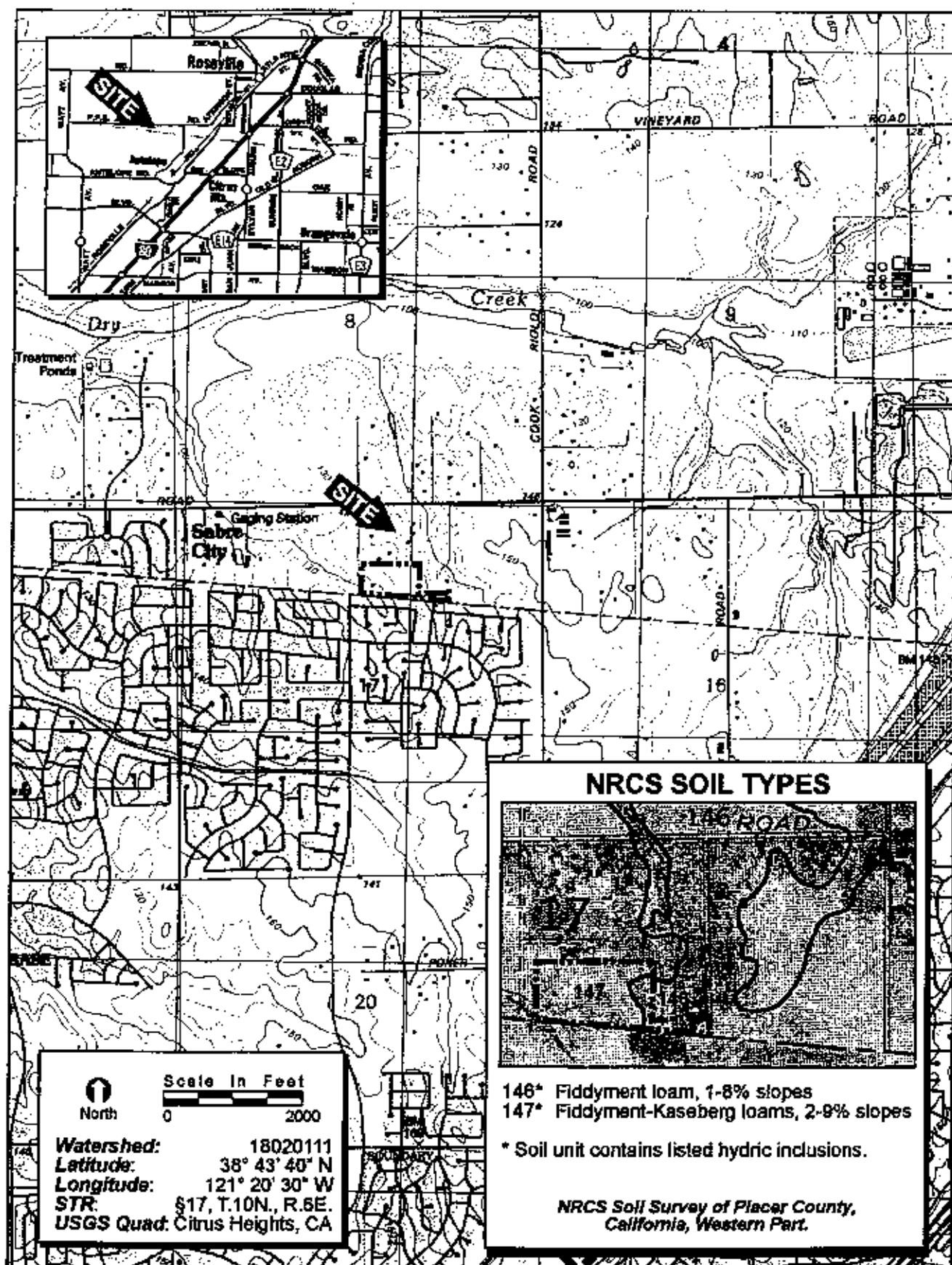
Attn: Mr. Jack Coulter  
County Builders, LLC  
3050 Tilden Drive  
Roseville, California 95661-7942  
Phone: (916) 782-1640  
Fax: (916) 782-1810

### AGENT:

Attn: Mr. Reed Hentze  
ECORP Consulting, Inc.  
2260 Douglas Blvd., Suite 160  
Roseville, California 95661  
Phone: (916) 782-9100  
Fax: (916) 782-9134

## SURVEY METHODOLOGY

The wetland delineation was conducted on July 9<sup>th</sup> and 10<sup>th</sup>, 2003, during which time, biologist Reed Hentze walked and inspected the entire site to determine the extent of potential waters of the U.S. within the project site. This wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Wetland boundaries and a number of three parameter data points were mapped and their Global Positioning System (GPS) coordinates were logged and recorded with a Trimble XTR unit. A black and white aerial photograph (1"=100', flown on April 4, 2000) was utilized to assist with mapping and ground-truthing. A *Munsell Soil Color Chart* (Kollmorgen Instruments Corp. 1990) was used to identify hydric soils in the field, and the *Jepson Manual* (Hickman 1994) was used for plant identification.



**FIGURE 1. Project Site and Vicinity**



The survey was conducted at the end of the growing season and many plant species had flowered, and most annual species had already declined.

## **EXISTING SITE CONDITIONS**

The Almond Ranch site is currently comprised of non-native annual grassland used as a horse pasture, annual grassland, and a rural residence with associated outbuildings. The site topography is gently rolling, and is situated at an elevation of approximately 140 feet above mean sea level. The annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and sticky tarweed (*Holocarpha virgata*). Scattered trees on-site include blue gum (*Eucalyptus globulus*) and blue oak (*Quercus douglasii*).

According to the *Soil Survey of Placer County, California, Western Part* two soil units have been mapped for the site, (146) Fiddymment loam, 1 to 8 percent slopes and (147) Fiddymment-Kaseberg loams, 2 to 9 percent slopes, (U.S. Department of Agriculture, Soil Conservation Service 1980).

## **WATERS OF THE U.S.**

Potentially jurisdictional waters of the U.S. mapped total 0.258 acre and are comprised of two seasonal wetland swales (0.247 acre) and an ephemeral drainage (0.011 acre). Three-parameter wetland delineation data were collected within wetlands and adjacent upland areas throughout the site. The data sheets have been included as Appendix A, and a list of plant species observed at the data collection points is included as Appendix B. The wetland delineation is presented as Figure 2 and in Appendix C.

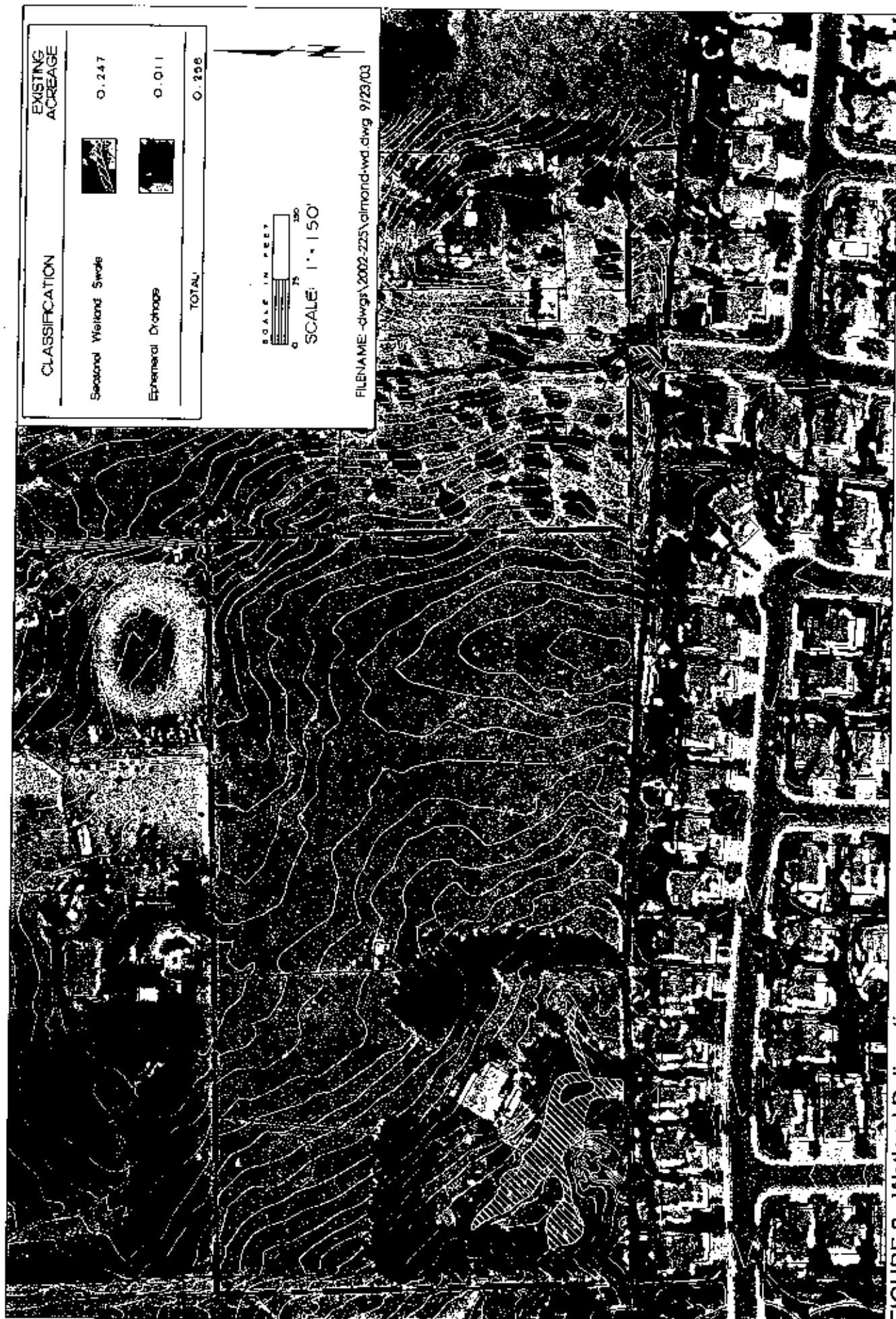


FIGURE 2. Wetland Delineation

## **Wetlands**

The seasonal wetland swale flows in the east to west direction and is largely fed by natural runoff from existing uplands to the northeast portion of the property. This swale flows into an ill-defined topographic basin in the southwestern corner of the site. The seasonal wetland has been mapped in this area. This seasonal wetland is comprised of herbaceous hydrophytic plants with a few scattered black willows (*Salix gooddingii*), and interspersed blue gum eucalyptus (*Eucalyptus globulus*). Ground cover was predominantly dead eucalyptus leaves with some live vegetation consisting of both hydrophytic (i.e., facultative species) and upland species such as ryegrass (*Lolium multiflorum*), curly dock (*Rumex crispus*), purple needle grass (*Nassella pulchra*), and morning glory (*Convolvulus arvensis*).

## **INTERSTATE OR FOREIGN COMMERCE**

The wetlands mapped on-site are within the Dry Creek watershed. Dry Creek is located several hundred yards to the north of the site. Due to the rolling topography of the site, the on-site seasonal wetland and wetland swale are tributary to Dry Creek. Dry Creek eventually flows into the Sacramento River, which is navigable water. Thus, these waters should be considered tributary and/or adjacent to a documented Water of a U.S. and would therefore be subject to interstate and/or foreign commerce.

## **CONCLUSION**

Potentially jurisdictional waters of the U.S. mapped total 0.247 acre consisting of two seasonal wetland swales and an ephemeral drainage. Upon verification of this wetland delineation by the Corps of Engineers, any impact to this feature would require permitting pursuant to Section 404 and 401 of the federal Clean Water Act.



## REFERENCES

- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
- Hickman, James C. *ed.* 1993. *The Jepson Manual, Higher Plants of California*, University of California Press, Berkeley, California.
- Kollmorgen Instruments Corp. 1990. Munsell Soil Color Charts. MacBeth Division of Kollmorgen Instruments Corporation. Baltimore, Maryland.
- U.S. Department of Agriculture, Soil Conservation Service. 1980. Soil Survey of Placer County Western Part, California. U.S. Department of Agriculture, Soil Conservation Service. Davis, California.
- U.S. Department of the Interior, Geological Survey. 1992. "Citrus Heights, California" 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

## **LIST OF APPENDICES**

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Appendix A – Wetland Delineation Data Sheets

Appendix B – Plant List

Appendix C – Wetland Delineation

## APPENDIX A

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### Wetland Delineation Data Sheets





# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: ALMOND RANCH Date: 07-09-2003 Sample Point: 001-UPLAND  
 Applicant/Owner: MR. JACK COULTER, COUNTY BUREAU Field Investigator(s): R. HENTZ  
 County: FLAHER State: CA Plant Community: ANNUAL GRASSLAND  
 Quad(s): CITRUS HEIGHTS Section/Township/Range: 17/10N/6E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>LOL MUL</u>	<u>FAC</u>	<u>HERB</u>	<u>22</u>	5) _____	_____	_____	_____
2) <u>HEM PON</u>	<u>FAC</u>	<u>HERB</u>	<u>22</u>	6) _____	_____	_____	_____
3) <u>HEM FIT</u>	<u>FACU</u>	<u>HERB</u>	<u>22</u>	7) _____	_____	_____	_____
4) <u>CEN SOL</u>	<u>NIL</u>	<u>HERB</u>	<u>22</u>	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 2/4 = 50 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_

Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_

Comments: UPLAND AREA SLOPING TO NE (ORLANDA AREA)

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 FIDDMONT - KAGEBERG LOAMS

Drainage Class: WELL DRAINED

Taxonomy [Subgroup]: FINE-LOAMY MIXED THICK TEXTURE DRYHIC ALB

Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_

Inclusions [Series/Phase]: ALMOND SOILS IN DISSEMINATIONS

On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottled Color	Mottled/Abund/Contrast/Size	Texture, Concretions, Structure
<u>8</u>	<u>A</u>	<u>10YR 4/4</u>	<u>—</u>	<u>—</u>	<u>LOAM</u>

Comments: \_\_\_\_\_

#### DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: \_\_\_\_\_

General comments: \_\_\_\_\_

Wetland Type: \_\_\_\_\_

## HERBACEOUS COVER / DOMINANCE WORK SHEET

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
ERE SET N/L	10	12
LCL MUL FAC	20	22
HEM PUN FAC	20	22
HEM FIT FACU	20	22
CQU SOL N/L	20	22
TOTAL SUM ( $\Sigma$ ) =	90	100%

**COVER:**

## Vegetation

Bare Ground

## Rocks

Other

TOTAL =

100%

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Size: ALMOND RANCH Date: 07/09/03 Sample Point: 002 - UPLAND  
 Applicant/Owner: MR. J. COULTER, COUNTY BUILDERS Field Investigator(s): R. HENTZ  
 County: PLACER State: CA Plant Community: ANNUAL GRASSLAND  
 Quad(s): CITRUS HEIGHTS Section/Township/Range: 17/10N/R6E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>HOL VIR</u>	<u>N/L</u>	<u>HERB</u>	<u>44</u>	5) _____	_____	_____	_____
2) <u>TAE CAP</u>	<u>N/L</u>	<u>HERB</u>	<u>33</u>	6) _____	_____	_____	_____
3) <u>RUM ACE</u>	<u>FAC</u>	<u>HERB</u>	<u>23</u>	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 0/3 = 0 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: UPLAND AREA OF HILLSLOPE

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 FIDDLER - KASSELING LOAMS Drainage Class: WELL DRAINING  
 Taxonomy [Subgroup]: \_\_\_\_\_ Confirm Map Type: Yes ☐ No ☒  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: ALAMO SOILS IN DEPRESSIONS On Hydric Soils List: Yes ☐ No ☒  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>4.0</u>	<u>A</u>	<u>7.5YR 4/3</u>	_____	_____	<u>HEAVY COMPACT CLAY/SAND</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: SOILS EXTREMELY COMPACTED DUE TO LIVESTOCK

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: \_\_\_\_\_

General comments: \_\_\_\_\_

Wetland Type: NONE

**HERBACEOUS COVER / DOMINANCE WORK SHEET**

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
TAE CAP	30	33
HOL VIR	20	44
RUM ACE	20	23
TOTAL SUM ( $\Sigma$ ) =	90	100%

<u><b>COVER:</b></u>	
Vegetation	50%
Bare Ground	50%
Rocks	0
Other	0
<b>TOTAL =</b>	<b>100%</b>

<u>Species (Descending Order)</u>	<u>Relative Cover</u>	<u>Cumulative Cover</u>	<u>Indicator Status</u>	<u>Dominance</u>
HOL VIR	44	44	N/L	X
TAE CAP	33	77	N/L	X
RUM ACE	23	100	FAC <sup>-</sup>	
TOTAL SUM ( $\Sigma$ ) =	100%			

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: ALMOND FRACK Date: 07/09/03 Sample Point: 003 - Wetland Point  
 Applicant/Owner: M. J. COULTER, COUNTY BUILDERS Field Investigator(s): E. HENTZE  
 County: PLACER State: CA Plant Community: \_\_\_\_\_  
 Quad(s): CITRUS HEIGHTS Section/Township/Range: 1E 10N R6E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: URBAN, IRRIGATION RUN OFF, MINOR CATION

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>HOR MAR</u>	<u>FAC +</u>	<u>HERB</u>	<u>91</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 100 = 100 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetland  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other WELL DRAINAGE  
 Comments: PATCHES ARE DRAIN SW THROUGH THIS SWALE

#### SOILS

HYDRIC SOILS? Yes ☒ No ☐

Series/Phase: 147 FIDDLINGTON - KAREARS LOAMS Drainage Class: WELL DRAINAGE  
 Taxonomy (Subgroup): FINE-LOAMY, MIXED, THERMIC TYPIC DRYCROPLES Confirm Map Type: Yes ☒ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions (Series/Phase): ALAMO SOILS IN DEPRESSIONS On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>4.0</u>	<u>A</u>	<u>10.5YR4/1</u>	_____	_____	<u>LOAM</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: BASED ON SOILS, VEG, HYDROLOGY

General comments: \_\_\_\_\_

Wetland Type: SEASONAL WETLAND SWALE

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>	
HOR MAR GR	100	91	
CON ARY NL	10	9	
TOTAL SUM ( $\Sigma$ ) =	110	100%	

COVER:

Vegetation \_\_\_\_\_

Bare Ground \_\_\_\_\_

Rocks \_\_\_\_\_

Other \_\_\_\_\_

TOTAL = 100%

[illegible]

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# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: ALMOND RIVER Date: 07/09/03 Sample Point: 004  
 Applicant/Owner: MR. J. COUTER, COUNTY BUILDERS Field Investigator(s): R. HENRITZ  
 County: PLACER State: CA Plant Community: ANNUAL GRASSLAND  
 Quad(s): CITRUS HEIGHTS Section/Township/Range: 17/10N/6E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>TAE CAP</u>	<u>N/L</u>	<u>HERB</u>	<u>33</u>	5) _____	_____	_____	_____
2) <u>HEM RUN</u>	<u>FAC</u>	<u>HERB</u>	<u>23</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 1/2 = 50%

Comments: AREA NEAR POTENTIAL FLOODATION RUN OFF FROM TRAIL

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_

Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other WELL DRAINED

Comments: UPLAND SOIL DATA POINT

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 FRODOGENT-KAUFERS LOAMS Drainage Class: WELL DRAINED

Taxonomy [Subgroup]: FINE-LOAMY, MIXED, THERMIC TYPIC DURECHUMPS Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_

Inclusions [Series/Phase]: ALMOND SOILS IN DEPRESSIONS On Hydric Soils List: Yes ☐ No ☒

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>5.0</u>	<u>A</u>	<u>7.5 YR 5/3</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: \_\_\_\_\_

General comments: \_\_\_\_\_

Wetland Type: NONE

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
TAE CAP	30	33
RUM ACE	10	11
ERE SET	10	11
HEN RUN	20	23
HEN FIT	10	11
LIL MUL	10	11
TOTAL SUM ( $\Sigma$ ) =	90	100%

COVER:

Vegetation

60

Bare Ground

40

Rocks

0

Other \_\_\_\_\_

0

TOTAL =

100%

[illegible]

TOTAL SUM ( $\Sigma$ ) = 100%



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: ALAMO FAIRWAY Date: 07-09-03 Sample Point: 005 - UPLAND  
 Applicant/Owner: MR. J. COVISON, COUNTY BUILDINGS Field Investigator(s): R. HENTZE  
 County: PLACER State: CA Plant Community: ANNUAL GRASSLAND  
 Quad(s): CORRUS HEIGHTS Section/Township/Range: 17/10N/6E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>HEMP RUN</u>	<u>FAC</u>	<u>HERB</u>	<u>33</u>	5) _____	_____	_____	_____
2) <u>TRE LAR</u>	<u>N/L</u>	<u>HERB</u>	<u>33</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 1/2 = 50 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_

Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_

Comments: POINT LOCATED ALONG SLOPE WHERE MOST OF SITE DRIPING DURING PRELIM

#### SOILS

NO CLEAR EVIDENCE OF OTHER WETLAND FEATURES

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 - SEDIMENT - KASEBURG LOAMS Drainage Class: WELL DRAINED

Taxonomy (Subgroup): FINE - LOAMY, MIXED, THERMIC TYPE SHALLOWS Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_

Inclusions (Series/Phase): ALAMO SOILS IN DEPRESSIONS On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>6.0</u>	<u>A</u>	<u>10 YR 4/3</u>	_____	_____	_____

Comments: \_\_\_\_\_

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: \_\_\_\_\_

General comments: \_\_\_\_\_

Wetland Type: NONE

[illegible]

**TOTAL SUM ( $\Sigma$ ) = 100%**

# ECORP Consulting, Inc.

ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: ALMOND RANCH Date: 07-09-2003 Sample Point: 006 - UPLAND  
 Applicant/Owner: MR. J. COULTER, COUNTY BUILDERS Field Investigator(s): R. HENITZ  
 County: PLACER State: CA Plant Community: ANNUAL GRASSLAND  
 Quad(s): CLEAR HEIGHTS Section/Township/Range: 17/10N/6E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>TAE CAP</u>	<u>N/A</u>	<u>HERB</u>	<u>62</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 0/1 = 0 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pie \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: UPLAND AREA

### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 146 FIDMENT LOAM Drainage Class: WELL DRAINED  
 Taxonomy (Subgroup): FINE-LOAMY MINCO THURM THIC DISTURBED Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions (Series/Phase): PLANT SOILS IN DEPRESSIONS On Hydric Soils List: Yes ☐ No ☒  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>6.0</u>	<u>A</u>	<u>10YR 3/3</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: \_\_\_\_\_

General comments: UPLAND PAR POINT TO POINT 002

Wetland Type: NONE

[illegible][illegible]

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# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: FLORIANO FARM Date: 07-07-2003 Sample Point: C07  
 Applicant/Owner: MR. J. COULTER, COUNTY BUILDING Field Investigator(s): E. HENRY  
 County: FLORIAN State: CA Plant Community: ANNUAL GRASSLAND  
 Quad(s): C-10-10-10-10 Section/Township/Range: 17/10N/6E  
 Do normal environmental conditions exist site? Yes ☐ No ☒ If no, explain: RUN OFF FROM IRRIGATED GARDEN  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>TAR CAP</u>	<u>NIL</u>	<u>HERB</u>	<u>20</u>	5) _____	_____	_____	_____
2) <u>LOL MUL</u>	<u>FAC</u>	<u>HERB</u>	<u>20</u>	6) _____	_____	_____	_____
3) <u>RAO FOR</u>	<u>FAC</u>	<u>HERB</u>	<u>20</u>	7) _____	_____	_____	_____
4) <u>CON GRV</u>	<u>NIL</u>	<u>HERB</u>	<u>20</u>	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 1/4 = 25 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Dam: Yes ☐ No ☒ If yes, \_\_\_\_\_

Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: 2 (in.)

Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_

Comments: DRAINAGE PATTERNS ALIGNED BY FLOWING DRAINAGE TO SOUTH

### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 146 FINE-LOAM - LOAMS Drainage Class: WELL DRAINING

Taxonomy [Subgroup]: FINE-LOAM PIED TROPIC TYPE DRYERALS Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_

Inclusions [Series/Phase]: ALAMO SOIL IN DEPOSITIONS On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>14.0</u>	<u>A</u>	<u>7.5 YR 4/2</u>	_____	_____	<u>LOAM</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: SOILS & VEG DATA SUPPORT

General comments: \_\_\_\_\_

Wetland Type: NONE - UPLAND SWALE

## HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible]

<u>COVER:</u>	
Vegetation	<u>100</u>
Bare Ground	<u>    </u>
Rocks	<u>    </u>
Other <u>          </u>	<u>    </u>
TOTAL =	<u>100%</u>

<u>Species (Descending Order)</u>	<u>Relative Cover</u>	<u>Cumulative Cover</u>	<u>Indicator Status</u>	<u>Dominants</u>
TAE CAP	27	27	N/L	X
SOL MUL	20	47	FAC	X
BRO FOR	20	67	FACU-	X
CON ARV	20	87	N/L	K.
VRT DIO	13	100	FALW	
TOTAL SUM ( $\Sigma$ ) =	100%			

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: ALMOND RANCH Date: 07-15-2003 Sample Point: 008 UPLAND  
 Applicant/Owner: MR. J. COWLEY, COUNTY BUILDING Field Investigator(s): R. HENRIK  
 County: FLACER State: CA Plant Community: ANNUAL GRASSLAND  
 Quad(s): CITEL 22 S.W. 1/4 Section/Township/Range: 17 / 10N / 6E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) TAE GRASS	N/L	HERB	28	5)			
2) HOAR NUR	FAL +	HERB	18	6)			
3) HEM BUN	FAL	HERB	18	7)			
4)				8)			

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 2/3 = 66 %

Comments: HYDROPHYTIC VEG. -> MOISTURE ASSOCIATED WITH ANIMALS IN ENCLOSED AREA IS ANIMAL EXCREMENT.

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_

Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_

Comments: TERRAIN SLOPES TOWARDS S.W.

### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 FLOTTMENT - KASEBELS LOAMS Drainage Class: WELL DRAINING

Taxonomy (Subgroup): FINE-LOAMY, HEAVY, THERMOTYPIC DIXIEBELS Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_

Inclusions (Series/Phase): ALAMO SOILS IN DEPRESSIONS On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
4	A	7.5 YR 4/3			SANDY LOAM

Comments: \_\_\_\_\_

### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: UPLAND BASED ON HYDROLOGY & SOILS

General comments: \_\_\_\_\_

Wetland Type: NONE

## HERBACEOUS COVER / DOMINANCE WORK SHEET

Species Observed			Actual Cover	Relative Cover
CEN	SOL	N/L	10	9
HEM	FIT	FALV	10	9
HEM	PUN	FAC	20	18
LED	TAR	FALV	10	9
HOR	MUR	FAC	20	18
TAE	CAP	N/L	30	28
TRI	HIR	N/L	10	9
TOTAL SUM ( $\Sigma$ ) =			110	100%

**COVER:**

### Vegetation

Bare Ground

Rocks

Other \_\_\_\_\_

TOTAL = 100%

[illegible]



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: ALMOND RANCH Date: 07-15-2003 Sample Point: 009 - UPLAND  
 Applicant/Owner: MR. J. COULME, COUNTY BUILDINGS Field Investigator(s): R. HENTZ  
 County: PLACER State: CA Plant Community: ANNUAL GRASSLAND  
 Quad(s): CITRUS HEIGHTS Section/Township/Range: 17/10N/16E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>LOL MUL</u>	<u>FAC</u>	<u>HERB</u>	<u>55</u>	5) _____	_____	_____	_____
2) <u>TAC CAP</u>	<u>W/L</u>	<u>HERB</u>	<u>26</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 1/2 = 50 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetland  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: PAVED POINT TO WETLAND SIGNAL POINT 3002

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 FIDDLING - CASEGERS LOAMS Drainage Class: WELL DRAINING  
 Taxonomy (Subgroup): FINE-LOAMY, MIXED, FINE-TEXTURED, SHALLOW, TYPIC DURCHOMY Confirm Map Type: Yes ☐ No ☒  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions (Series/Phase): ALAMO SOILS IN DEPRESSIONS On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>1</u>	<u>A</u>	<u>2.5 YR 4/2</u>	_____	_____	<u>SANDY LOAM</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

#### DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: \_\_\_\_\_  
 General comments: TRIED TO PLACE POINT OUTSIDE OF SLOUGH W/ALSO ENTIRE WESTERN  
HALF OF PLANT 007 DRAINAGE THRESHOLD WAS Wetland Type: NONE  
AREA.

## HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible][illegible]

**TOTAL SUM ( $\Sigma$ ) = 100%**

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Alamo Ranch Date: 02-15-2003 Sample Point: 010-1  
 Applicant/Owner: Mr. J. Coulter, County Building Field Investigator(s): R. Henize  
 County: Texas State: CA Plant Community: Annual Grassland (Savanna of Wet)  
 Quad(s): Citrus Heights Section/Township/Range: 12/10N/10E  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: Seasonal Inundation, Urban Run Off

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>RUM CRT</u>	<u>FACW</u>	<u>HERB</u>	<u>35</u>	5) _____	_____	_____	_____
2) <u>HEM PUN</u>	<u>FAC</u>	<u>HERB</u>	<u>26</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 3/2 = 100 %

Comments: Small amount of herbaceous layer predominantly bare ground  
under Eucalyptus canopy

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ if yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☒ Sediment Deposits ☒ Drainage Patterns in Wetland  
 Secondary Indicators (2 or more required):  
☒ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: Recent inundation also fills with 2-3" annually

#### SOILS

HYDRIC SOILS? Yes ☒ No ☐

Series/Phase: 147 FIDDLER - KASBERG SOAMS Drainage Class: Wet Drained  
 Taxonomy [Subgroup]: FINE-LOAMY MIXED, THERMIC TYPIC DYSTROPHES  
LOAMY MIXED, THERMIC, SHALLOW, TYPIC DYSTROPHES Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretion  
☒ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 \* Inclusions [Series/Phase]: Alamo Soils in Depressions On Hydric Soils List: Yes ☒ No ☐

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>10</u>	<u>A</u>	<u>10YR 5/2</u>	<u>10YR 5/6</u>	<u>MODERATE / HIGH / 3mm</u>	<u>SILT SAND</u>

Comments: HARDPAN AT 10"

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: FAIRLY WET SOIL VEG HYDROLOGIC

General comments: \_\_\_\_\_

Wetland Type: SEASONAL WETLAND

## HERBACEOUS COVER / DOMINANCE WORK SHEET

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
EUC GLD N/L	10	13
SAL SAP GRW*	10	13
RUM CRI GRW*	30	35
LOL MUL GAC	10	13
HEAI PUN GAC	20	26
TOTAL SUM ( $\Sigma$ ) =	80	100%

<u>COVER:</u>	
Vegetation	<u>50</u>
Bare Ground	<u>40</u>
Rocks	<u>10</u>
Other <u>canopy</u>	<u>10</u>
TOTAL =	100%

[illegible]

## APPENDIX B

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Plant List



**Almond Ranch – Wetland Delineation  
Plants Observed at Data Points**

<b>Abbr.</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Indicator Status</b>
AVE FAT	<i>Avena fatua</i>	Wild oat	N/L
BRO HOR	<i>Bromus hordeaceus</i>	Soft brome	FACU-
CEN SOL	<i>Centaurea solstitialis</i>	Yellow star-thistle	N/L
CON ARV	<i>Convolvulus arvensis</i>	Morning Glory	N/L
CYN DAC	<i>Cynodon dactylon</i>	Bermuda grass	FAC
ERE SET	<i>Eremocarpus setigerus</i>	Turkey mullien	N/L
EUC GLO	<i>Eucalyptus globulus</i>	Blue gum	N/L
HEM FIT	<i>Hemizonia fitchii</i>	Fitch's spikeweed	FACU
HEM PUN	<i>Hemizonia pungens</i>	Common tarweed	FAC
HOR MAR	<i>Hordeum marinum</i>	Mediterranean Barley	FAC+
HOR MUR	<i>Hordeum murinum</i>	Barley	NI
HOL VIR	<i>Holocarpha virgata</i>	Sticky tarweed	N/L
LEO TAR	<i>Leontodon taraxacoides</i>	Hairy hawkbit	FACU
LOL MUL	<i>Lolium multiflorum</i>	Ryegrass	FAC*
RAN BON	<i>Ranunculus bonariensis</i>	Carter's buttercup	OBL
RUM ACE	<i>Rumex acetosella</i>	Sheep Sorrel	FAC-
RUM CRI	<i>Rumex crispus</i>	Curly dock	FACW-
TAE CAP	<i>Taeniatherum caput-medusae</i>	Medusahead grass	N/L
TRI spe.	<i>Trifolium species</i>	Clover	N/L
URT DIO	<i>Urtica dioica</i>	Stinging Nettle	FACW

**Indicator Status Codes**

**OBL** = Obligate Wetland; occur almost always (estimated probability >99%) under natural conditions in wetlands.

**FACW** = Facultative Wetland; usually occur in wetlands (estimated probability 67%-99%) under natural conditions in wetlands.

**FAC** = Facultative; equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).

**FACU** = Facultative Upland; usually occur in non-wetlands (estimated probability 67%-99%).

**UPL** = Obligate Upland; occur almost always (estimated probability >99%) in non-wetlands in the region specified.

**N/L** = Not Listed.

**NI** = No indicator was recorded for those species for which insufficient information was available to determine a status.

-- = May or may not occur in wetlands depending upon species.

A positive (+) sign indicates a frequency toward the higher (more frequently found in wetlands) end of the facultative categories.

A negative (-) sign indicates a frequency toward the lower (less frequently found in wetlands) end of the facultative categories.

An asterisk (\*) indicates a tentative assignment based upon limited information or conflicting review.





## APPENDIX C

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Wetland Delineation

NOT INCLUDED



Insert color separator  
sheet here!



ANNUAL REPORT OF FINDINGS REGARDING  
WET AND DRY SEASON SURVEYS FOR FEDERALLY-LISTED CRUSTACEANS  
FOR  
**WHISPERING CREEK**  
(PLACER COUNTY, CALIFORNIA)

January 7, 2005

Prepared for:  
**Towne Development of Sacramento, Inc.**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



**ANNUAL REPORT OF FINDINGS REGARDING  
WET AND DRY SEASON SURVEYS FOR  
FEDERALLY-LISTED CRUSTACEANS**

**CONTENTS**

**WHISPERING CREEK**

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**LIST OF ATTACHMENTS**

Attachment A – USFWS Vernal Pool Data Sheets



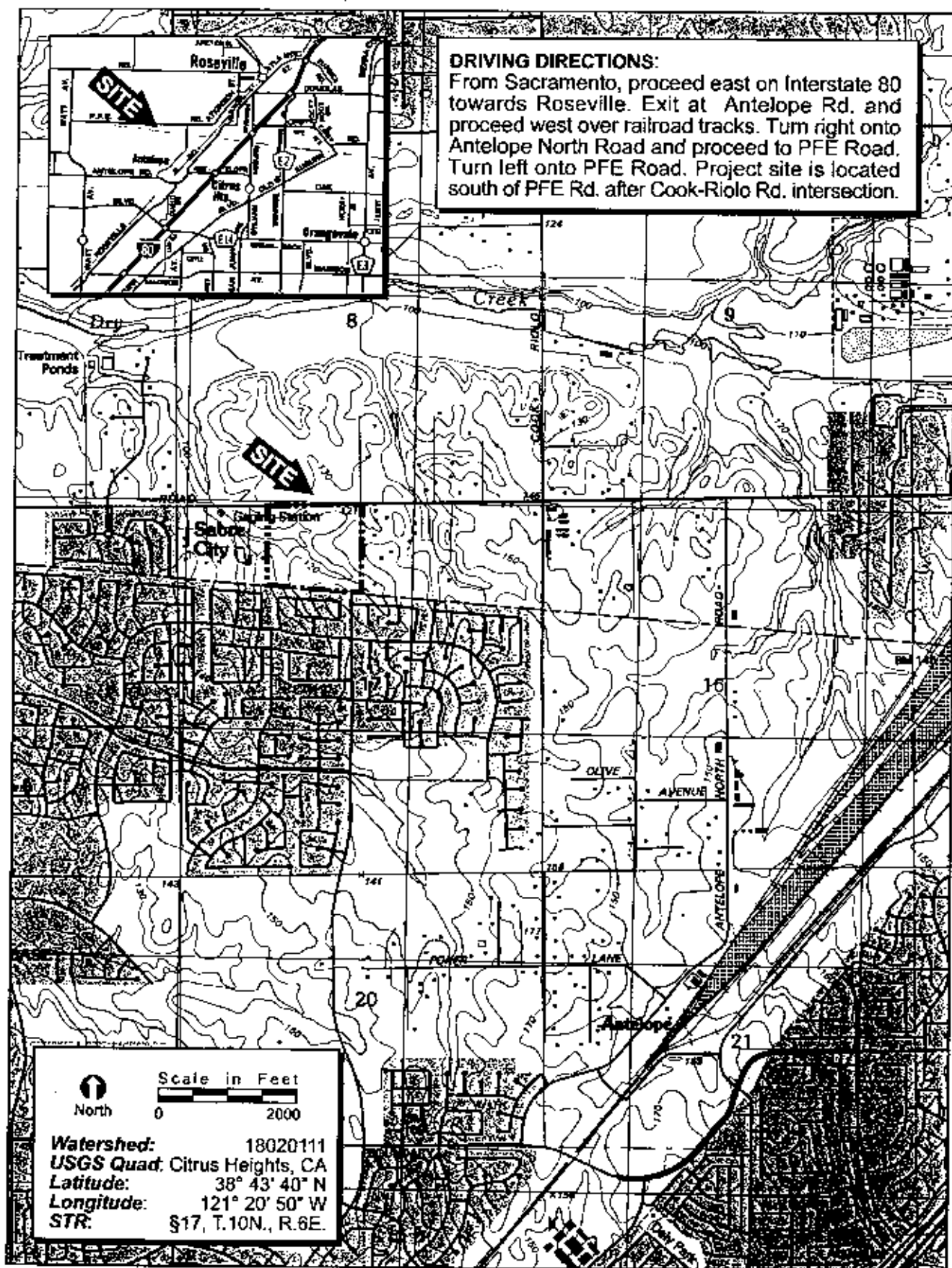


## INTRODUCTION

On behalf of Towne Development of Sacramento, Inc., ECORP Consulting, Inc. (ECORP) conducted a wet season and dry season investigation targeting branchiopod crustaceans at the Whispering Creek Property in Placer County, California. The purpose of the survey was to determine the presence of aquatic crustacean (branchiopod) species listed by the U.S. Fish and Wildlife Service (USFWS) [(i.e., vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardii*)]. Surveys were conducted under the authority of Federal Fish and Wildlife Permit No. TE-012973-2 in compliance with the April 19, 1996 *Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods* (Guidelines). This document is the Annual Report of Findings for the Whispering Creek site (as required by Item VII of the *Guidelines*), which summarizes the results of wet and dry season determinate survey work for this property. Mr. Ken Fuller of the USFWS gave ECORP verbal authorization to conduct the survey on 18 November 2003.

The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes that front Meandering Way, on the west by undeveloped lands and rural residences, on the north by PFE Road, and on the east by Oly Lane and rural residences. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey) (Figure 1. *Project Site and Vicinity Map*).

The Whispering Creek vegetation community is currently comprised of non-native annual grassland, willow scrub riparian habitat, and ephemeral drainages and swales. The site topography is gently rolling, and is situated at an elevation of approximately 120 feet above mean sea level. Potential vernal pool crustacean habitat occurs on the property as 9 seasonal wetlands. SW-1 is a relatively deep pool at maximum inundation (approximately 55 cm deep).



**FIGURE 1. Project Site and Vicinity Map**



## WET SEASON SURVEY

### Methods

Survey methodology followed "wet season sampling" protocols outlined in the April 19, 1996 *Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods* (Guidelines). The property was visited on 10 December 2003, 22 December 2003, 05 January 2004, 19 January 2004, 02 February 2004, 17 February 2004, and 01 March 2004, 15 March 2004, 29 March 2004, and 12 April 2004. The wetland was dipnetted on each occasion. Necessary data were collected and documented on U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey data forms. Permitted biologists Marc Beccio and Susan Ramones conducted the wet season surveys.

### Results

During the 2003-2004 sampling season, the seasonal wetland feature on the property was surveyed on 10 separate occasions. No branchiopods were found. Table 1 presents findings by survey date.

**Table 1.** *Survey Dates and Findings for 2003-2004 Whispering Creek Wet Season Survey.*

Survey Date	Wetland Feature / Branchiopods Presence
	SW-1
10 December 2003	No
22 December 2003	No
05 January 2004	No
19 January 2004	No
02 February 2004	No
17 February 2004	No
01 March 2004	No
15 March 2004	No
29 March 2004	No
12 April 2004	No

Completed U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey data forms and tabular data summary sheets are provided in Attachment A. Data forms/tables summarize all required data (i.e., wetland depth of inundation, surface area, water temperature, branchiopod species occurrence, and approximate number of individuals per species).

## **DRY SEASON SURVEY**

### **Methods**

Soil samples were collected October 15, 2004, and subsequently processed and analyzed according to "dry season sampling" protocols as outlined in the Guidelines.

ECORP processed a total of 10 soil sub samples (approximately 100-ml volume) from the wetland feature. The samples were collected and placed into individually labeled Whirl-Pak® plastic bags.

All soil material was completely processed and analyzed. Each sub-sample was mechanically separated by sieving soil material through a series of four (8-inch diameter) brass sieves (sizes #25, #45, #70, and #100 ASTM). Sieved fractions were then further differentiated via density separation (i.e. saline float). Floating portions of soil fractions retained by the size #70, #45 and #100 sieves (i.e., particles that are 212  $\mu$ m to 355  $\mu$ m, 355  $\mu$ m to 710  $\mu$ m, and greater than 710  $\mu$ m in size, respectively) were then microscopically inspected for the presence of anostracan (fairy shrimp) and notostracan (tadpole shrimp) cysts. Invertebrate material encountered was also noted on survey detail sheets.

### **Results**

No anostracan or notostracan cysts were found in any of the soil sample fractions. Table 2 summarizes invertebrate material found in the soil sample fractions of SW1.

**Table 2. Results of 2004 Dry Season Survey**

Sample	Organic Fractions / Mesh Size				Inorganic Fractions / Mesh Size			
	25	45	70	100	25	45	70	100
SW1-1	0	0	0	0	0	0	0	0
SW1-2	OS	OS	OS	OS	0	OS	0	0
SW1-3	OS	0	0	0	0	0	0	0
SW1-4	0	0	0	0	0	0	0	0
SW1-5	0	0	OS	0	0	0	0	0
SW1-6	0	0	0	0	0	0	0	0
SW1-7	0	OS	CE	0	OS	0	0	0
SW1-8	0	CE	CE	0	0	0	0	0
SW1-9	OS	CE, OS	CE, OS	CE, OS	OS	OS	OS	0
SW1-10	OS	CE, OS	CE, OS	CE, OS	0	OS	OS	OS

OS = Ostracoda shells, CF = Coleoptera fragments, DF = Daphniidae cysts, CO = Collembola, GE = Gastropoda eggs,  
 CE = Cladoceran epiphilia

No branchiopod cysts were found in the soil samples taken from the SW1 (seasonal wetland) on the Whispering Creek property.

## SUMMARY

The seasonal wetland on the Whispering Creek property was investigated to determine the presence of listed aquatic crustacean (branchiopod) species. Wet season surveys were conducted between 10 December 2003 and 12 April 2004. No anostracan or notostracan species were encountered. Similarly, no anostracan or notostracan cysts were found in soil samples taken on 15 October 2004.



## ATTACHMENT A

---

USFWS Vernal Pool Data Sheets





Site/Project Name: Whispering Creek 2002-146  
Susan Ramones, Marc Beccio

County/Quad: Placer/Citrus Heights

Collectors:

Permit #: TE-012973-2

Sample Date: 12/10/2003  
Start Time: 10:00 AM  
Start Air Temp (C): 14.4

End Time: 10:30 AM  
Start Air Temp (C) 14.4

<u>Pool Number</u>	<u>Pool Depth (cm)</u>	<u>Surface Area (m)</u>	<u>Max. Surface Area (m)</u>	<u>Water Temperature (C)</u>	<u>Comments</u>
SW-1	39	9*3	9*3	10.5	1 Corixidae

Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 12/22/2003

Start Time: 11:25 AM

End Time: 12:20 PM

Start Air Temp (C): 11

Start Air Temp (F): 51

<u>Pool Number</u>	<u>Pool Depth (cm)</u>	<u>Surface Area (m)</u>	<u>Max. Surface Area (m)</u>	<u>Water</u>	<u>Comments</u>
				<u>Temperature</u> <u>(C)</u>	
SW-1	46	9*3	9*3	9.5	

Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 1/5/2004

Start Time: 2:05 PM

End Time: 2:25 PM

Start Air Temp (C): 11

Start Air Temp (F): 51

<u>Pool Number</u>	<u>Pool Depth (cm)</u>	<u>Surface Area (m)</u>	<u>Max. Surface Area (m)</u>	<u>Water</u>	<u>Comments</u>
				<u>Temperature (C)</u>	
SW-1	45	9*3	9*3	9	Ostracoda = 100s

Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 1/19/2004

Start Time: 1:45 PM

End Time: 2:15 PM

Start Air Temp (C): 9

Start Air Temp: 9

<u>Pool Number</u>	<u>Pool Depth (cm)</u>	<u>Surface Area (m)</u>	<u>Max. Surface Area (m)</u>	<u>Water</u>	<u>Comments</u>
				<u>Temperature</u> (C)	
SW-1	40	2.5*6	9*3	9	Ostracoda = 100s, 2 Nototnechtidae adults

Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 2/2/2004

Start Time: 1:00 PM

End Time: 1:30 PM

Start Air Temp (C): 8.5

Start Air Temp (C): 8.5

<u>Pool Number</u>	<u>Pool Depth (cm)</u>	<u>Surface Area (m)</u>	<u>Max. Surface Area (m)</u>	<u>Water Temperature (C)</u>	<u>Comments</u>
SW-1	appx. 55	3*20		7.5	Receiving approximately 1 cfs flow from swale. Ostracoda =

Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 2/17/2004

Start Time: 10:30 AM

End Time: 11:05 AM

Start Air Temp (C): 15

Start Air Temp (F): 15

<u>Pool Number</u>	<u>Pool Depth (cm)</u>	<u>Surface Area (m)</u>	<u>Max. Surface Area (m)</u>	<u>Water Temperature (C)</u>	<u>Comments</u>
SW-1	47	3*8		13	Pacific chorus frog embryos = 100s, Ostracoda = 1000s, Culicidae larvae = 10s.

Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 3/1/2004

Start Time: 11:45 AM

End Time: 12:30 PM

Start Air Temp (C): 9

Start Air Temp (F): 10

<u>Pool Number</u>	<u>Pool Depth</u> <u>(cm)</u>	<u>Surface</u> <u>Area (m)</u>	<u>Max. Surface</u> <u>Area (m)</u>	<u>Water</u> <u>Temperature</u> <u>(C)</u>	<u>Comments</u>
SW-1	46	3*10		11	Pacific chorus frog larvae = 100s, Ostracoda = 1000s

Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 3/15/2004

Start Time: 10:20 AM

End Time: 10:45 AM

Start Air Temp (C): 20

Start Air Temp (20

<u>Pool Number</u>	<u>Pool Depth</u> <u>(cm)</u>	<u>Surface</u> <u>Area (m)</u>	<u>Max. Surface</u> <u>Area (m)</u>	<u>Water</u> <u>Temperature</u> <u>(C)</u>	<u>Comments</u>
SW-1	32	3*5		17	Pacific chorus frog larvae = 100s, Ostracoda = 1000s



Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 3/29/2004

Start Time: 10:00 AM

End Time: 10:15 AM

Start Air Temp (C): 20

Start Air Temp: 20

<u>Pool Number</u>	<u>Pool Depth (cm)</u>	<u>Surface Area (m)</u>	<u>Max. Surface Area (m)</u>	<u>Water Temperature (C)</u>	<u>Comments</u>
SW-1	10	0.5*2		19	PCF larvae = 100s, Ostracoda = 100s, Culicidae = 100s,

Site/Project Name: Whispering Creek 2002-146

County/Quad: Placer/Citrus Heights

Collectors: Marc Beccio

Permit #: TE-012973-2

Sample Date: 4/12/2004

Start Time: 9:45 AM

End Time: 10:00 AM

Start Air Temp (C): 16

Start Air Temp (F): 61

<u>Pool Number</u>	<u>Pool Depth</u> <u>(cm)</u>	<u>Surface</u> <u>Area (m)</u>	<u>Max. Surface</u> <u>Area (m)</u>	<u>Water</u>	<u>Comments</u>
				<u>Temperature</u> <u>(C)</u>	
SW-1	DRY				

U.S. Fish and Wildlife Service Vernal Pool Data Sheet  
Dry Season Survey

Note: Please fill out the required information completely for each site visit.

This form is being submitted to serve as part of the 90-day report: \_\_\_\_\_ no ☒ yes

Required color slides and/or photographs for the project site are included: \_\_\_\_\_ no \_\_\_\_\_ yes

Date: 10/15/2004 Time: 12:30 County: PLACER Quad: CITRUS HEIGHTS

Collector(s): MARC BECCIS Permit #: TE-012973-2

Site/Project Name: WHISPERING CREEK Pool #: SW1

Township: \_\_\_\_\_ Range: \_\_\_\_\_ Section: \_\_\_\_\_ lat. \_\_\_\_\_ long. \_\_\_\_\_

Habitat Condition: (circle where appropriate)

☒ - undisturbed      disturbed:      tire tracks      garbage      discing/plowing

- ungrazed      grazed:      cattle      horses      sheep      other \_\_\_\_\_  
   light      moderate      heavy

- land use of habitat: AWAITING DEVELOPMENT

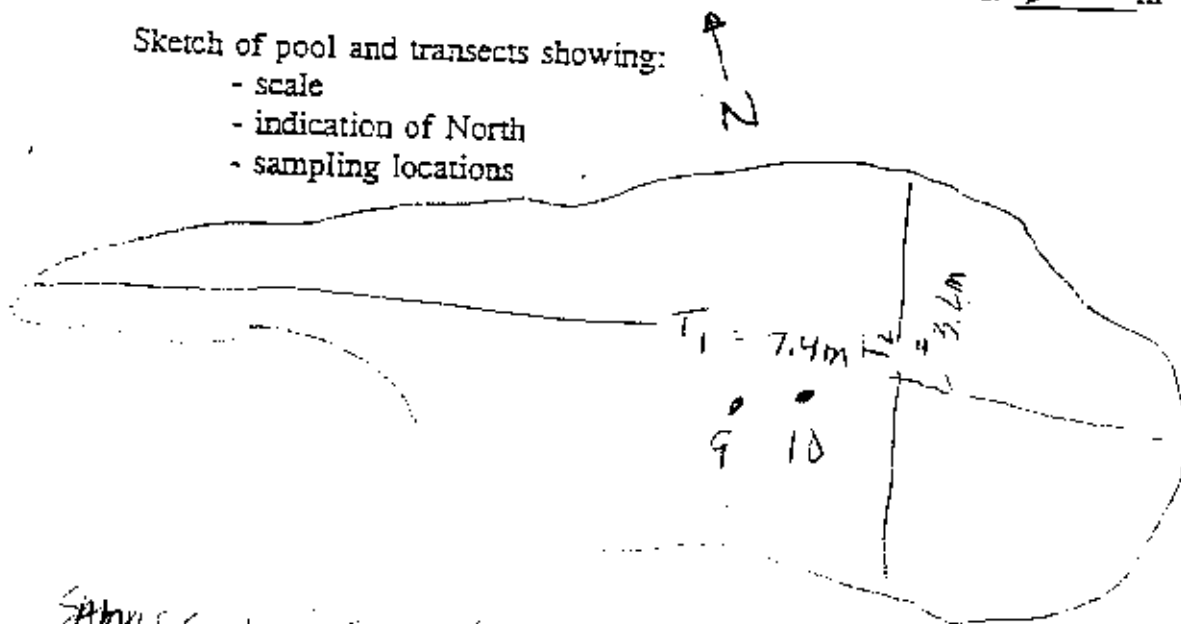
Pool Bottom Surface: (circle where appropriate)

hardpan    ☒ claypan?    cobbly/rocky    lava flow    other \_\_\_\_\_

Pool Depth: 40 cm (estimated maximum)      Surface Area: 26 m<sup>2</sup> (estimated maximum)

Sketch of pool and transects showing:

- scale
- indication of North
- sampling locations



SAMPLES 1-5 TAKEN ON T1  
SAMPLES 6-8 TAKEN ON T2

SAMPLES 9-10 TAKEN  
AT DEEPEST PART OF POOL



Insert color separator  
sheet here!



NATIONWIDE PERMIT 39  
PRE-CONSTRUCTION NOTIFICATION  
FOR  
**WHISPERING CREEK**  
(PLACER COUNTY, CALIFORNIA)

March 12, 2003

Prepared for:  
**Towne Development of Sacramento, Inc.**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS





## **RESPONSIBLE PARTIES**

### **Applicant:**

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Roseville, CA 95661  
Phone: (916) 782-9100  
Fax: (916) 782-9134

## **NATIONWIDE PERMIT NUMBERS**

The applicant is requesting verification of authorization under Nationwide Permit (NWP) No 39 (Residential, Commercial, and Institutional Developments).

## **PROJECT NAME**

Whispering Creek (formerly referred to as PFE 36)

## **PROJECT LOCATION**

The Whispering Creek property is a 36-acre undeveloped parcel within unincorporated western Placer County, west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes that front Meandering Way, on the west by undeveloped lands and rural residences, on the north by PFE Road, and on the east by Oly Lane and rural residences. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey) (Figure 1. *Project Site and Vicinity*).

## **PROJECT DESCRIPTION AND PURPOSE**

The proposed project involves the development of 57 single-family lots with a recreational area, and will preserve two open space areas surrounding wetlands (1.048 acres of seasonal wetland and 0.070 acre of seasonal marsh) and waters (0.355 acre of intermittent drainage) and totaling approximately 6.97 acres (Figure 2. *Proposed Impacts and Preservation Plan*). It will be necessary to place three road crossings and several outfalls within this preserve area. There are approximately 0.003 acre of seasonal marsh and 0.015 acre of intermittent drainage located within an easement held by the Sacramento Municipal Utility District. These wetlands/waters have been classified as "avoided", as they are not subject to long-term preservation.

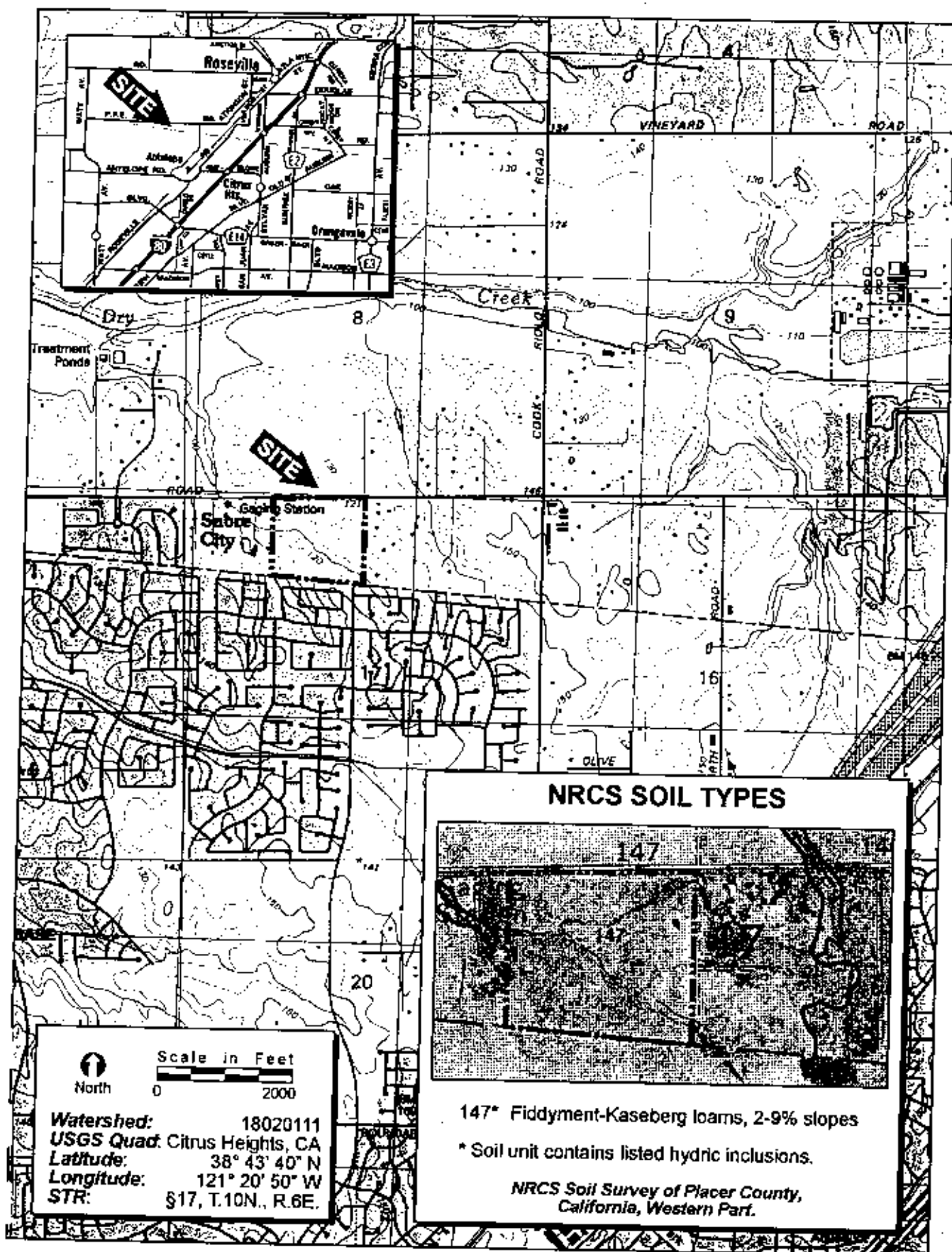


FIGURE 1. Project Site and Vicinity Map

2002-146 Whispering Creek

**ECORP Consulting, Inc.**  
 ENVIRONMENTAL CONSULTANTS  
 ©2003

WATERS OF THE U.S. ACREAGE				
CLASSIFICATION	EXISTING ACREAGE	PRESERVE ACREAGE	AVOIDED ACREAGE	DIRECT IMPACT ACREAGE
Seasonal Wetland Scud	1.058	1.048	N/A	0.010
Seasonal Wetland	0.007	N/A	N/A	0.007
Seasonal Marsh	0.073	0.070	0.003	N/A
Intermittent Drainage	0.394	0.355	0.015	0.024
<b>TOTAL</b>	<b>1.532</b>	<b>1.473</b>	<b>0.018</b>	<b>0.041</b>

SCALE IN FEET  
0 100 200  
SCALE 1" = 200'

FILENAME: DWG5\2002-146\WG-IMP.DWG 2/21/03

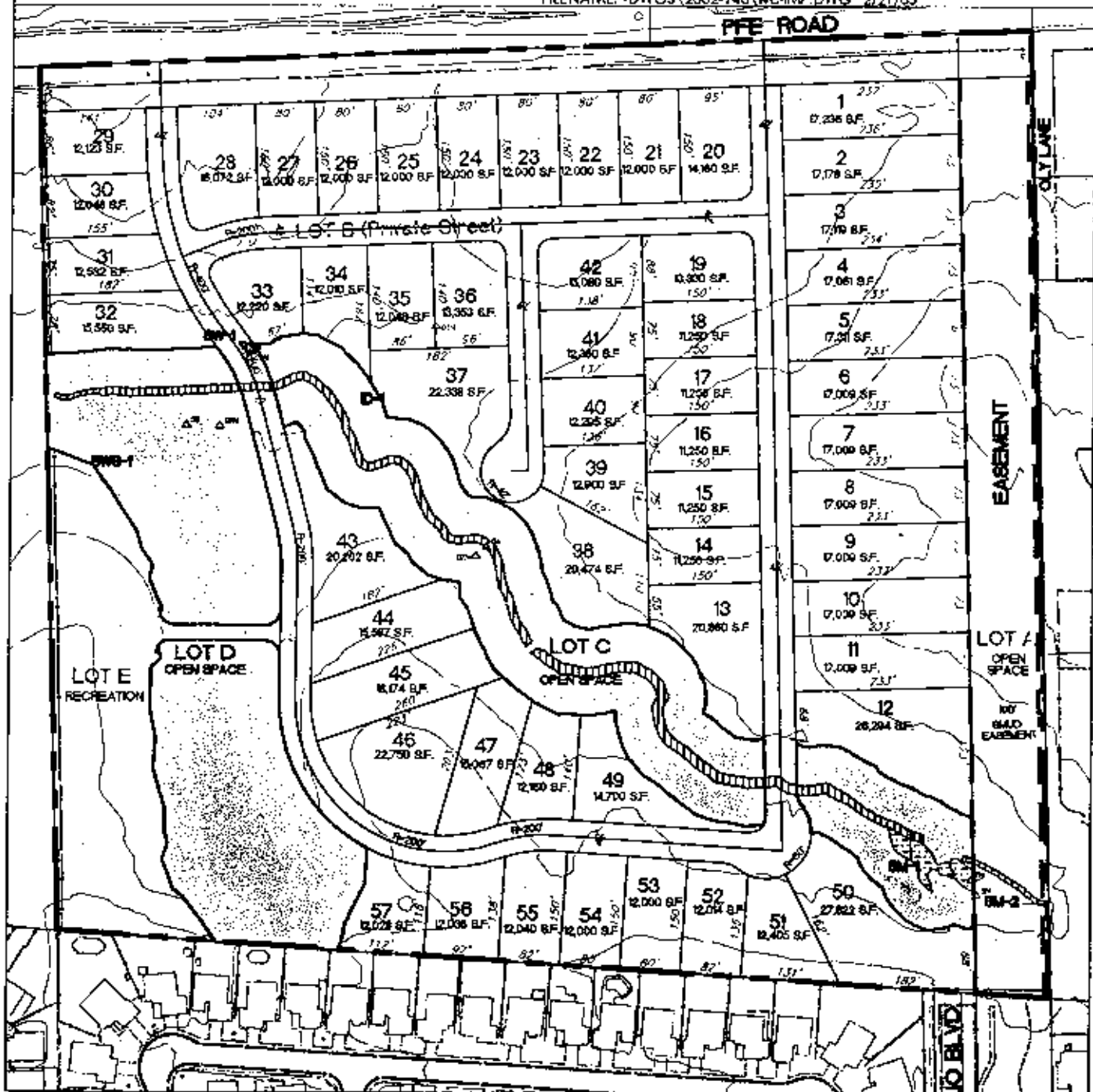


FIGURE 2. Proposed Impacts and Preservation Plan  
2002-146 Whispering Creek

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

## EXISTING SITE CONDITIONS

The Whispering Creek site is currently comprised of non-native annual grassland, willow scrub riparian habitat, and ephemeral drainages and swales. The site topography is gently rolling, and is situated at an elevation of approximately 120 feet above mean sea level. The non-native annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and sticky tarweed (*Holocarpha virgata*).

Riparian willow scrub vegetation community is present in association with a seasonal wetland drainage that receives runoff from the adjacent housing subdivision to the south. The riparian vegetation is comprised primarily of willow species (*Salix* spp.) and Fremont cottonwood (*Populus fremontii*), with scattered Himalaya blackberry (*Rubus discolor*) and Valley oak (*Quercus lobata*). Understory vegetation is made up of a mixture of upland and wetland plants such as bull thistle (*Cirsium vulgare*), South American vervain (*Verbena bonariensis*), dallisgrass (*Paspalum dilatatum*), annual rabbit-foot grass (*Polypogon monspeliensis*), and ryegrass.

One soil unit has been mapped for the entire site, (147) Fiddymment-Kaseberg loams, 2 to 9 percent slopes (U.S. Department of Agriculture, Soil Conservation Service 1980).

## JURISDICTIONAL DELINEATION

Potentially jurisdictional waters of the U. S. mapped total 1.532 acres and include wetlands (1.138 acres) and other waters (ECORP 2002, Attachment A). Wetlands consist of seasonal wetland (0.007 acre), wetland swale (1.058 acres), and seasonal marsh (0.073 acre), and other waters are comprised of an intermittent drainage (0.394 acre). Table 1 outlines the existing and proposed impact acreages.

**Table 1. Existing and Proposed Impact Acreages of Water of the U.S.**

Type	Existing	Direct Impact
Waters		
Seasonal Wetland Swale	1.058	0.010
Seasonal Wetland	0.007	0.007
Seasonal Marsh	0.073	0
Other Waters		
Intermittent Drainage	0.394	0.024
<b>Total:</b>	<b>1.532</b>	<b>0.041</b>

## **DIRECT AND INDIRECT ADVERSE ENVIRONMENTAL IMPACTS**

Direct Impacts: The project would directly affect 0.041 acre of waters of the U.S., due to partial fill of seasonal wetland, seasonal wetland swale, and intermittent drainage due to road and culvert construction.

Indirect Impacts: No indirect impacts are associated with this project.

## **FEDERALLY LISTED SPECIES (General Condition 11)**

No federally listed special-status species were observed during field reconnaissance. However, although unlikely due to its hydrologic connection to a drainage feature, the seasonal wetland found on-site may be considered by the U.S. Fish and Wildlife Service (USFWS) to constitute potential habitat for vernal pool fairy shrimp (*Branchinecta lynchi*) and/or the vernal pool tadpole shrimp (*Lepidurus packardii*) (Figure 3). Accordingly, we request that you initiate consultation with USFWS, pursuant to Section 7 of the federal Endangered Species Act. We have provided information typically requested by the USFWS for your use in the consultation process (Attachment B). Please forward this information to the USFWS along with your request for consultation. The project site is not located within recently proposed Critical Habitat for the vernal pool fairy shrimp.

## **HISTORIC PROPERTIES**

A literature and records search will be done using files from the California Historical Resources Information System, affiliated with the California Office of Historic Preservation. The results of this inquiry will be forwarded to the Corps upon completion. Any cultural resource sites, objects, structures, buildings, or artifacts discovered during the investigation will be recorded using Instructions for Recording Historical Resources (California Office of Historic Preservation 1995).

## **MINIMIZATION AND AVOIDANCE**

The proposed permanent impacts total 0.041 acre, below the 0.5-acre threshold for Nationwide Permit No. 39. The proposed plan has been developed to reduce impacts to the waters of the U.S. by setting aside two open space preserve areas on-site that will total approximately 6.97 acres. The small amount of impact proposed is considered unavoidable, as road crossings are required and the road could not be realigned to avoid the small seasonal wetland without encroaching within 50 feet of the larger seasonal wetland swale. Approximately 0.018 acre of intermittent drainage and seasonal marsh will be completely avoided due to an easement along the eastern project boundary.

## **OTHER PERMITS REQUIRED**

### **Federal Clean Water Act, Section 401**

A request for Water Quality Certification will be submitted to the Central Valley Regional Water Quality Control Board.

### **California Fish and Game Code**

A Lake and Streambed Alteration Agreement will be submitted to the California Department of Fish and Game (CDFG) for direct impacts to the intermittent drainage within the project area.

### **Federal Endangered Species Act**

No federally listed special-status species were observed during field reconnaissance. However, although unlikely due to its connection to a drainage feature, the seasonal wetland found on-site may be considered by the U.S. Fish and Wildlife Service (USFWS) to constitute potential habitat for vernal pool fairy shrimp (*Branchinecta lynchi*) and/or the vernal pool tadpole shrimp (*Lepidurus packardii*).

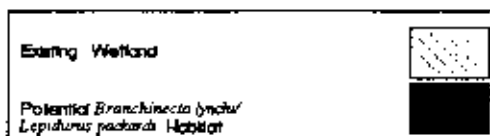
### **California Environmental Quality Act**

The Whispering Creek project was included in the Dry Creek West Placer Community Plan Environmental Impact Report (Placer County 1990). The Resolution was passed by Placer County on May 14, 1990, (Attachment C).

## **PROPOSED MITIGATION PLAN**

### **Federal Wetland Fill Compensation**

Based upon the estimates provided in this document, the amount of fill requiring compensatory mitigation by this project would be approximately 0.041 acre. The applicant proposes to provide mitigation for these impacts via the purchase of appropriate wetland credits (i.e., 0.041 acre of seasonal wetland) from an agency-approved mitigation bank, as outlined in Table 2, below.



SCALE: 1" = 200'

FILENAME: \\DWGS\2002-146\wc-shrimp.dwg 12/3/02

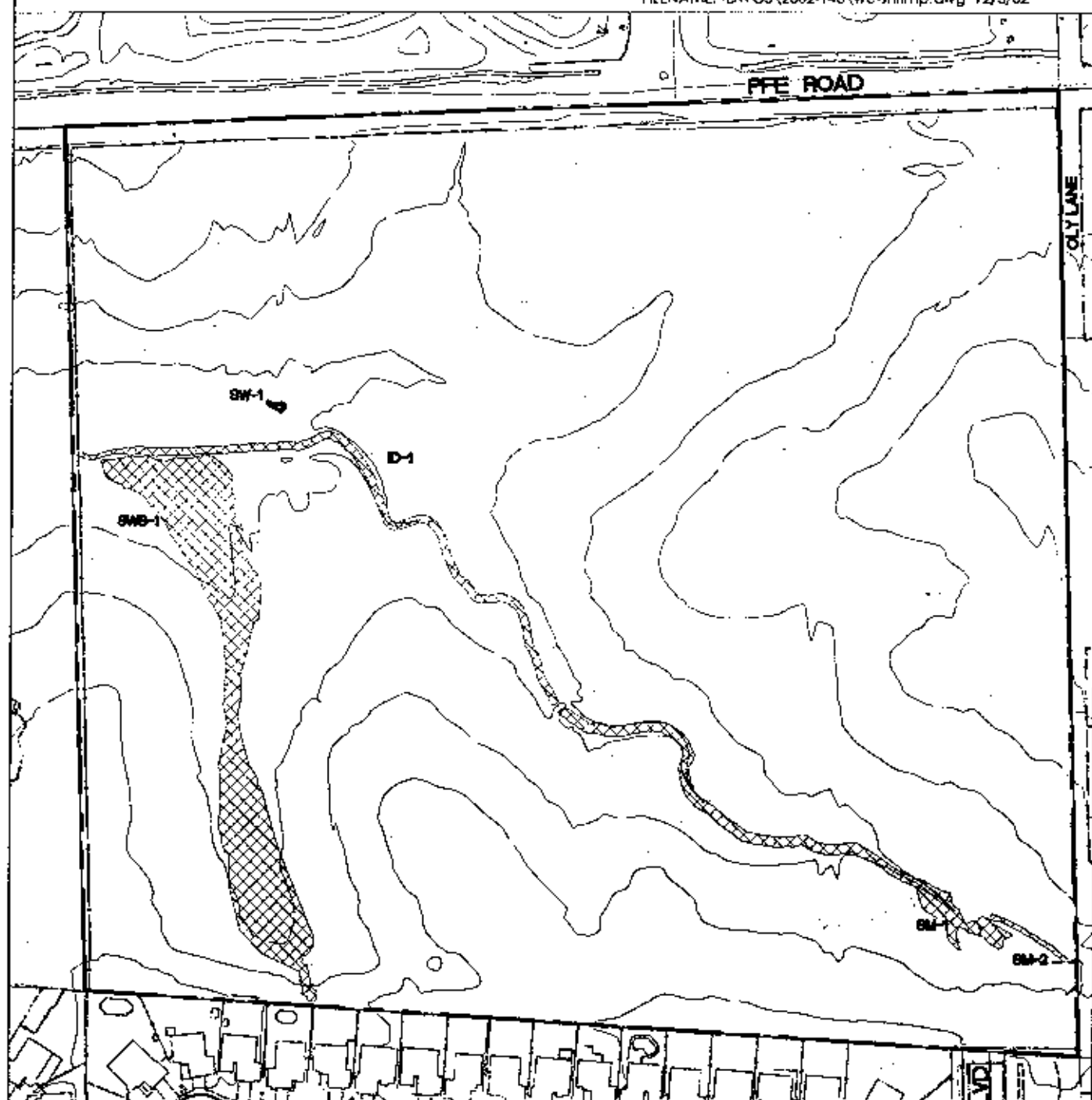


FIGURE 3. Potential *Branchinecta lynchi*/  
*Lepidurus packardii* Habitat

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

## Mitigation for Federally Listed Species Habitat

Should the U.S. Fish and Wildlife Service determine that the seasonal wetland at the project site represents habitat for federally listed species, then the applicant would propose additional mitigation, as follows.

Proposed mitigation for wetlands determined to be fairy and/or tadpole shrimp habitat include the creation of fairy and/or tadpole shrimp habitat at a 1:1 ratio (0.007) and the preservation of vernal pool habitat at a ratio of 2:1 (0.014). The applicant proposes to purchase these credits at an approved mitigation bank or other off-site mitigation area acceptable to the USFWS. Mitigation for these impacts would be accomplished via the purchase of vernal pool habitat.

**Table 2. Proposed Mitigation Acreages**

<b>Type</b>	<b>Existing</b>	<b>Impacted</b>		<b>Mitigation</b>	
		<i>Direct</i>	<i>Indirect</i>	<i>Creation 1:1</i>	<i>Preservation 2:1</i>
<b>Waters</b>					
Seasonal Wetland Swale	1.058	0.010	0	0.010	0
Seasonal Wetland	0.007	0.007	0	0.007*	0.014*
Seasonal Marsh	0.073	0	0	0	0
<b>Other Waters</b>					
Intermittent Drainage	0.394	0.024	0	0.024	0
<b>Total:</b>	<b>1.532</b>	<b>0.041</b>	<b>0</b>	<b>0.041</b>	<b>0.014</b>

\*Mitigation for federally listed species habitat would be accomplished via the purchase of vernal pool credits.



## REFERENCES

ECORP Consulting, Inc. 2002. *Wetland Delineation for Whispering Creek, Placer County, California*. Roseville, CA.

Placer County et. al. 1990. *Dry Creek West Placer Community Plan Environmental Impact Report*. Auburn, CA.

## **LIST OF ATTACHMENTS**

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Attachment A – Wetland Delineation

Attachment B – Section 7 Consultation Information

Attachment C – Resolution for Dry Creek West Placer Community Plan Environmental  
Impact Report

## **ATTACHMENT A**

---

### Wetland Delineation



WETLAND DELINEATION  
FOR  
**WHISPERING CREEK**  
PLACER COUNTY, CALIFORNIA

November 27, 2002

*Prepared for:*  
TOWNE REALTY, INC.



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



## CONTENTS

## WHISPERING CREEK

### WETLAND DELINEATION

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### FIGURES

Figure 1 – Project Site and Vicinity Map

Figure 2 – Wetland Delineation

### APPENDICES

Appendix A – Wetland Delineation Data Sheets

Appendix B – Plant List

Appendix C – Wetland Delineation





## INTRODUCTION

On behalf of Towne Realty, Inc., ECORP Consulting, Inc. has conducted a wetland delineation of the proposed Whispering Creek development site located in unincorporated western Placer County, California. Whispering Creek is a 36-acre undeveloped parcel west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes fronting Meandering Way, on the west by undeveloped lands and rural residences, on the north by PFE Road, and on the east by Oly Lane and rural residences. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey 1992) (Figure 1).

### APPLICANT:

Attn: Mr. Bill Brown  
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### AGENT:

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Phone: (916) 782-9100  
Fax: (916) 782-9134

## SURVEY METHODOLOGY

The wetland delineation was conducted on October 24, 2002, during which time, biologist Keith Kwan walked and inspected the entire site to determine the extent of potential waters of the U.S. within the project site. This wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Wetland boundaries and a number of three parameter data points were mapped and their Global Positioning System (GPS) coordinates were logged and recorded with a Trimble PROXR unit. A black and white aerial photograph (1"=100,' flown on April 4, 2000) was utilized to assist with mapping and ground-truthing. A *Munsell Soil Color Chart* (Kollmorgen Instruments Corp. 1990) was used to identify hydric soils in the field, and the *Jepson Manual* (Hickman 1994) was used for plant identification.

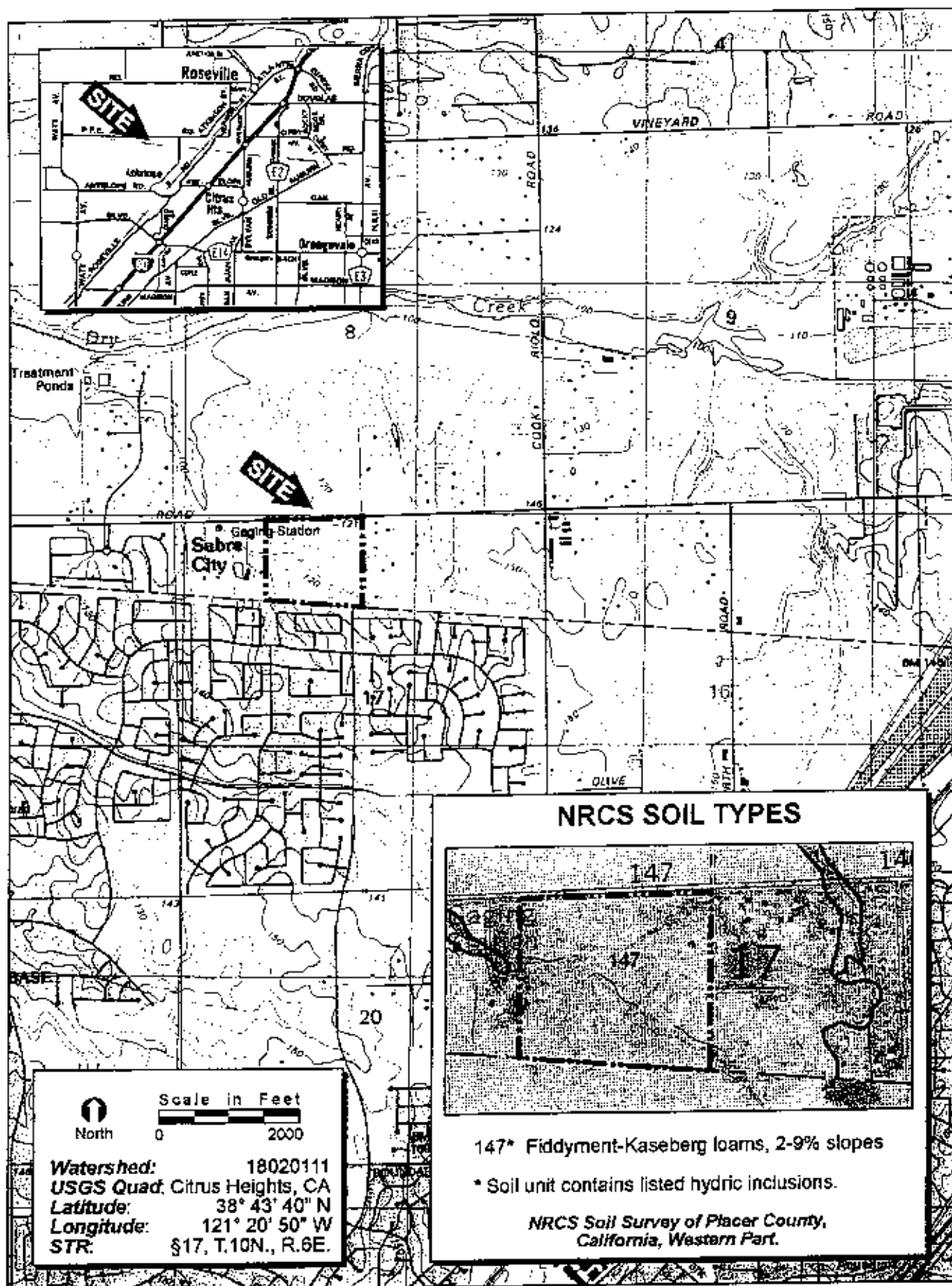


FIGURE 1. Project Site and Vicinity Map

The survey was conducted at the end of the growing season and many plant species had flowered, and most annual species had already declined.

## **EXISTING SITE CONDITIONS**

The Whispering Creek site is currently comprised of non-native annual grassland, willow scrub riparian habitat, and ephemeral drainages and swales. The site topography is gently rolling, and is situated at an elevation of approximately 120 feet above mean sea level. The non-native annual grassland is comprised of non-native weedy species such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), filaree (*Erodium botrys*), yellow-star thistle (*Centaurea solstitialis*), and sticky tarweed (*Holocarpha virgata*).

The riparian willow scrub vegetation community is present in association with a seasonal wetland drainage that receives runoff from the adjacent housing subdivision to the south. The riparian vegetation is comprised primarily of willow species (*Salix* spp.) and Fremont cottonwood (*Populus fremontii*), with scattered Himalaya blackberry (*Rubus discolor*) and Valley oak (*Quercus lobata*). Understory vegetation is made up of a mixture of upland and wetland plants such as bull thistle (*Cirsium vulgare*), South American vervain (*Verbena bonariensis*), dallisgrass (*Paspalum dilatatum*), annual rabbit-foot grass (*Polypogon monspeliensis*), and ryegrass.

One soil unit has been mapped for the entire site, (147) Fiddymment-Kaseberg loams, 2 to 9 percent slopes (U.S. Department of Agriculture, Soil Conservation Service 1980).

## **WATERS OF THE U.S.**

Potentially jurisdictional waters of the U. S. mapped total 1.532 acres and include wetlands (1.138 acres) and other waters. Wetlands consist of seasonal wetland (0.007 acre), wetland swale (1.058 acres), and seasonal marsh (0.073 acre), and other waters are comprised of an intermittent drainage (0.394 acre). Three parameter wetland delineation data sheets have

been included as Appendix A, and a list of plant species observed at the data collection points is included as Appendix B. The wetland delineation is presented as Figure 2 and in Appendix C.

## **Wetlands**

Seasonal wetlands are ephemerally wet areas where runoff accumulates within low-lying areas and/or adjacent to watercourses. These may occur as basins or linear features. Linear features are typically referred to as seasonal wetland swales. The vegetative composition of the seasonal wetland on-site is comprised of non-native wetland generalist plants as well as native annual species. These include Bermuda grass (*Cynodon dactylon*), tall flatsedge (*Cyperus eragrostis*), ryegrass, hyssop loosestrife (*Lythrum hyssopifolium*), and slender popcorn flower (*Plagiobothrys stipitatus*).

The wetland swale is comprised of riparian woody vegetation and an understory of herbaceous hydrophytic plants. The wetland may be characterized as seasonal, but is largely dependent upon runoff from the subdivision to the north of the site. Consequently, during periods of excessive runoff from landscape irrigation, this wetland swale becomes saturated and inundated in the lower lying areas. This may occur during any season through the year. The riparian canopy is comprised of Goodding's black willow (*Salix gooddingii*) and Fremont cottonwood. Herbaceous vegetation within the swale includes tall flatsedge, clustered dock (*Rumex conglomeratus*), curly dock (*R. crispus*), and cattail (*Typha* spp.).

The seasonal marsh within the eastern portion of the site is situated within and adjacent to a naturally occurring topographic swale and may also receive additional intermittent runoff from Don Julio Boulevard, which is located immediately to the south. Plants within the marsh are typical seasonal wetland and moist soil species such as annual rabbit-foot grass (*Polypogon monspeliensis*), Bermuda grass, tall flatsedge, soft rush (*Juncus effusus*), hairy willow-herb (*Epilobium ciliatum*), and prostrate knotweed (*Polygonum arenastrum*).

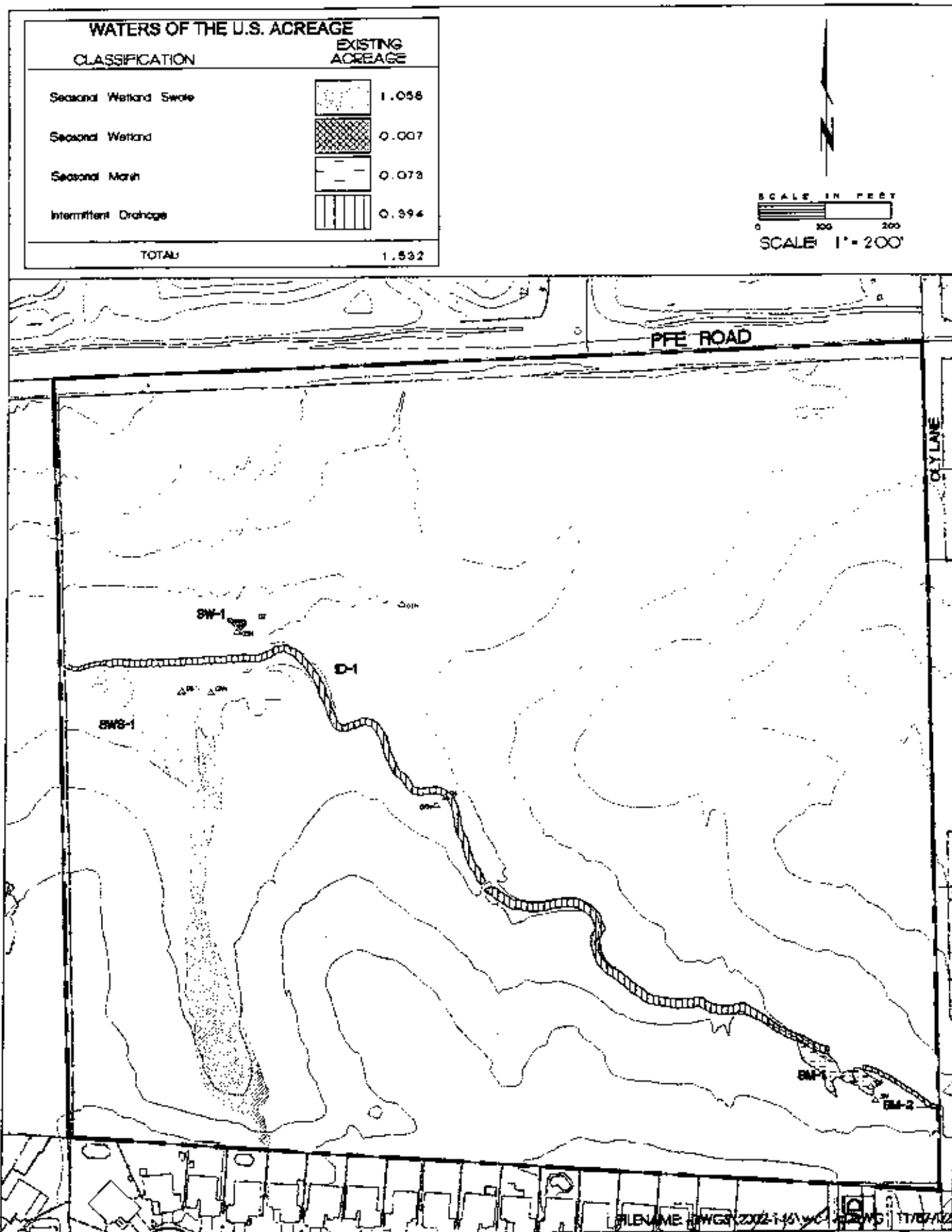


FIGURE 2. Wetland Delineation

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

## **Other Waters**

An intermittent drainage provides the primary drainage through the entire site. The drainage ranges from 6 to 15 feet wide (top of bank to top of bank) and approximately 1 to 4 feet deep (top of bank to bed). The flows are intermittent through the wet season and augmented by urban runoff and possibly ground water during the drier portions of the year. Vegetation is absent in reaches where flows are too high and suitable soil does not exist, while vegetative cover is persistent in reaches where sediment accumulation allows for growth within a relative unstable environment. The plant species observed within the drainage include typical wetland and moist soil species such as broad-leaf cattail (*Typha latifolia*), lady's thumb (*Polygonum persicaria*), annual rabbit-foot grass (*Polypogon monspeliensis*), and hairy willow-herb (*Epilobium ciliatum*).

## **INTERSTATE OR FOREIGN COMMERCE**

The wetlands mapped on-site are within the Dry Creek watershed. Dry Creek is located several hundred yards to the north of the site. Due to the rolling topography of the site, overland flows of rainwater accumulate within the on-site wetland features, and during the wet season, water levels increase and eventually spill into larger drainages on-site and off-site. These flows ultimately reach Dry Creek. Dry Creek eventually flows into the Sacramento River, which is navigable water. Thus, these waters should be considered tributary and/or adjacent to a documented Water of a U.S. and would therefore be subject to interstate and/or foreign commerce.

## **CONCLUSION**

Potentially jurisdictional waters of the U. S. mapped on-site total 1.532 acres and include wetlands (1.138 acres) and other waters. Wetlands consist of seasonal wetland (0.007 acre), wetland swale (1.058 acres), and seasonal marsh (0.073 acre), and other waters are comprised of an intermittent drainage (0.394 acre). Any impact to these features would likely require permitting pursuant to Section 404 and 401 of the federal Clean Water Act.

## REFERENCES

- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U. S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
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- Kollmorgen Instruments Corp. 1990. Munsell Soil Color Charts. MacBeth Division of Kollmorgen Instruments Corporation. Baltimore, Maryland.
- U.S. Department of Agriculture, Soil Conservation Service. 1980. Soil Survey of Placer County Western Part, California. U.S. Department of Agriculture, Soil Conservation Service. Davis, California.
- U.S. Department of the Interior, Geological Survey. 1992. "Citrus Heights, California" 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

## **LIST OF APPENDICES**

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Appendix A. Wetland Delineation Data Sheets

Appendix B. Plant List

Appendix C. Wetland Delineation



## APPENDIX A

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### Wetland Delineation Data Sheets



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

# ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 01  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: ephemeral surface

## VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Lolium</u>	<u>FAC</u>	<u>herb</u>	<u>38</u>	5) _____	_____	_____	_____
2) <u>Tar can</u>	<u>N/C</u>	<u>herb</u>	<u>33</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 1/2 = 50 %

Comments: \_\_\_\_\_

## HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☒ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: very shallow, surface

## SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymant-Karsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>	_____	<u>10YR2/2</u>	_____	_____	_____

Comments: high chroma; ox. rhizospheres present but no mottles

## \* DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: Does not meet criteria

General comments: \_\_\_\_\_

Wetland Type: \_\_\_\_\_

HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible]

COVER:

Vegetation	90
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 02  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: seasonal pooling

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Cyn dca</u>	<u>Few</u>	<u>herb</u>	<u>25</u>	5) _____	_____	_____	_____
2) <u>Cypera</u>	<u>Few</u>	<u>herb</u>	<u>17</u>	6) _____	_____	_____	_____
3) <u>Lyt hy s</u>	<u>Few</u>	<u>herb</u>	<u>17</u>	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 0/3 = 100 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☒ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☒ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☒ Other algal mat  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymint-Karlsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-4</u>		<u>10YR 4/3</u>	<u>-</u>		

Comments: \_\_\_\_\_

#### DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: wetland based on plants and definitive hydrology

General comments: \_\_\_\_\_

Wetland Type: seasonal wetland

## HERBACEOUS COVER / DOMINANCE WORK SHEET

<u>Species Observed</u>	<u>Actual Cover</u>	<u>Relative Cover</u>
Cyn dact	15	25
Cypera	10	17
Polygonum	5	8
Elythy s	10	17
Lolium	5	8
Plant.	5	8
Rumex	5	8
Polare	5	8
TOTAL SUM ( $\Sigma$ ) =	60	100%

COVER:

Vegetation	30
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

# ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 03  
 Applicant/Owner: Town Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

## VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tue cup</u>	<u>N/L</u>	<u>hmb.</u>	<u>35</u>	5) _____	_____	_____	_____
2) <u>Bro dia</u>	<u>N/L</u>	<u>hmb</u>	<u>26</u>	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 0/2 = 0 %

Comments: \_\_\_\_\_

## HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

## SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymant-Karsberg Loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy (Subgroup): fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions (Series/Phase): Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>	_____	<u>10YR 4/3</u>	<u>—</u>	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_

## DECISION

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: \_\_\_\_\_

General comments: adjacent upland area to pt. 02

Wetland Type: \_\_\_\_\_

## HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible]

COVER:

Vegetation	100
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 04  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: seasonal pooling

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Polmon</u>	<u>FACW</u>	<u>herb</u>	<u>45</u>	5) <u>Epil</u>	<u>FACW</u>	<u>herb</u>	<u>9</u>
2) <u>Rumex</u>	<u>FACW</u>	<u>herb</u>	<u>9</u>	6) <u>Cyn dca</u>	<u>FAC</u>	<u>herb</u>	<u>9</u>
3) <u>Cypera</u>	<u>FACW</u>	<u>herb</u>	<u>9</u>	7) _____			
4) <u>Brodiaea</u>	<u>FACW</u>	<u>herb</u>	<u>9</u>	8) _____			

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 5/6 = 83 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☒ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☒ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymant-Kaschong loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: Fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions (Series/Phase): Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottic Color	Mottic (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>		<u>10YR2/4</u>	<u>-</u>		

Comments: fine sediments

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

#### \* DECISION \*

Rationale: determination based on hydrology and plant

General comments: \_\_\_\_\_

Wetland Type: Seasonal marsh

HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible]

COVER:

## Vegetation

Bare Ground

Rocks

Other

TOTAL =

95

100%

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/25/02 Sample Point: 05  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tar cup</u>	<u>n/c</u>	<u>herb</u>	<u>78</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 0/1 = 0 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymant-Karsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy (Subgroup): fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions (Series/Phase): Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Concret/Size)	Texture, Concretions, Structure
<u>0-4</u>		<u>10YR4/3</u>			
_____					
_____					
_____					

Comments: high chroma

#### DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: criteria have not been met  
 General comments: upland adjacent to plot

Wetland Type: \_\_\_\_\_

**HERBACEOUS COVER / DOMINANCE WORK SHEET**

[illegible]

**COVER:**

Vegetation	100
Bare Ground	
Rocks	
Other	
<b>TOTAL =</b>	<b>100%</b>

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 06  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stem	Rel. % Cover	Dominant Species	Ind. Status	Stem	Rel. % Cover
1) <u>Type 1a</u>	<u>Obl</u>	<u>herb</u>	<u>67</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 1/1 = 100 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☒ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☐

Series/Phase: 147 Fiddymont-Kaschberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure

Comments: no soil pt. color taken

#### DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: determination based on hydrophytic plant dominance and wetl. hydrology

General comments: drainage with bed/bank

Wetland Type: Intermittent drainage

**HERBACEOUS COVER / DOMINANCE WORK SHEET**

[illegible]

COVER:

Vegetation	70
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 07  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tar oaks</u>	<u>N/L</u>	<u>herb</u>	<u>58</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 0% = 0 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_

Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_

Comments: upland adjacent to int. drainage

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymont-Kearney loams, 2 to 9 percent slopes Drainage Class: well drained

Taxonomy (Subgroup): fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_

Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐

Depth (in.) Horizon Matrix Color Mottle Color Mottle (Abund/Contrast/Size) Texture, Concretions, Structures

0-4

\_\_\_\_\_

10YR 4/3

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Comments: high chroma

#### DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: is far wet wet

General comments: upland adjacent to ab

Wetland Type: \_\_\_\_\_

## HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible]

COVER:

Vegetation	100
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]



# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

## ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 08  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☒ No ☐ Explain: intermittent flows during dry season

### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☒ No ☐

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Cypera</u>	<u>FACW</u>	<u>herb</u>	<u>50</u>	5) _____	_____	_____	_____
2) <u>Artemisia</u>	<u>FACW</u>	<u>herb</u>	<u>13</u>	6) _____	_____	_____	_____
3) <u>Sesuvium</u>	<u>FACW</u>	<u>Tree</u>	<u>13</u>	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 3/3 = 100 %

Comments: \_\_\_\_\_

### HYDROLOGY

WETLAND HYDROLOGY? Yes ☒ No ☐

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☒ Sediment Deposits ☒ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

### SOILS

HYDRIC SOILS? Yes ☒ No ☐

Series/Phase: 147 Fiddlyment-Harshing Loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Duricrusts Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☒ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  

Depth (in.)	Horizon	Matrix Color	Mottle Color	Mottle (Abund/Contrast/Size)	Texture, Concretions, Structure
<u>0-6</u>		<u>10YR 4/3</u>	<u>10YR 5/6</u>		

Comments: \_\_\_\_\_

### \* DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☒ No ☐

Rationale: all criteria have been met

General comments: \_\_\_\_\_

Wetland Type: wetland swale

## HERBACEOUS COVER / DOMINANCE WORK SHEET

[illegible]

COVER:

Vegetation	50
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]

**TOTAL SUM ( $\Sigma$ ) = 100%**

# ECORP Consulting, Inc.

## ENVIRONMENTAL CONSULTANTS

### ROUTINE WETLAND DELINEATION

Project/Site: Whispering Creek Date: 10/24/02 Sample Point: 09  
 Applicant/Owner: Towne Development Field Investigator(s): K. Kwan  
 County: Placer State: CA Plant Community: Annual Grassland  
 Quad(s): Citrus Heights, CA Section/Township/Range: T. 10 North, R. 6 East, Sec. 17  
 Do normal environmental conditions exist site? Yes ☒ No ☐ If no, explain: \_\_\_\_\_  
 Atypical Situation? Yes ☐ No ☒ Explain: \_\_\_\_\_  
 Is this a potential Problem Area? Yes ☐ No ☒ Explain: \_\_\_\_\_

#### VEGETATION

HYDROPHYTIC VEGETATION? Yes ☐ No ☒

Dominant Species	Ind. Status	Stratum	Rel. % Cover	Dominant Species	Ind. Status	Stratum	Rel. % Cover
1) <u>Tall lup</u>	<u>N/L</u>	<u>herb.</u>	<u>63</u>	5) _____	_____	_____	_____
2) _____	_____	_____	_____	6) _____	_____	_____	_____
3) _____	_____	_____	_____	7) _____	_____	_____	_____
4) _____	_____	_____	_____	8) _____	_____	_____	_____

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 0% = 0 %

Comments: \_\_\_\_\_

#### HYDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☒

Recorded Data: Yes ☐ No ☒ If yes, \_\_\_\_\_  
 Depth of surface water: \_\_\_\_\_ (in.) Depth to free water in pit: \_\_\_\_\_ (in.) Depth to saturated soil: \_\_\_\_\_ (in.)  
 Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more required):  
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other \_\_\_\_\_  
 Comments: \_\_\_\_\_

#### SOILS

HYDRIC SOILS? Yes ☐ No ☒

Series/Phase: 147 Fiddymant-Karlsberg loams, 2 to 9 percent slopes Drainage Class: well drained  
 Taxonomy [Subgroup]: fine-loamy, mixed, thermic Typic Durixeralfs Confirm Map Type: Yes ☐ No ☐  
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions  
☐ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other \_\_\_\_\_  
 Inclusions [Series/Phase]: Alamo inclusions in depression On Hydric Soils List: Yes ☒ No ☐  
 Depth (in.) Horizon Matrix Color Mottle Color Mottle (Abund/Contrast/Size) Texture, Concretions, Structure  
0-4 \_\_\_\_\_ 10YR 4/3 \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_

Comments: high chroma

#### DECISION \*

WETLAND / WATERS DETERMINATION? Yes ☐ No ☒

Rationale: as there have not been wet

General comments: upland - adjacent to pt. 28

Wetland Type: \_\_\_\_\_

**HERBACEOUS COVER / DOMINANCE WORK SHEET**[illegible]

COVER:

Vegetation	95
Bare Ground	
Rocks	
Other	
TOTAL =	100%

[illegible]

## APPENDIX B

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Plant List



# **Whispering Creek – Wetland Delineation Plants Observed at Data Points**

Abbr.	Scientific Name	Common Name	Indicator Status
AVE FAT	<i>Avena fatua</i>	Wild oat	N/L
BRI MIN	<i>Briza minor</i>	Little quaking grass	FACU
BRO DIA	<i>Bromus diandrus</i>	Ripgut brome	N/L
BRO HOR	<i>Bromus hordeaceus</i>	Soft brome	FACU-
CIC INT	<i>Cichorium intybus</i>	Chicory	NI
CYN DAC	<i>Cynodon dactylon</i>	Bermuda grass	FAC
CYP ERA	<i>Cyperus eragrostis</i>	Tall flatsedge	FACW
EPI CIL	<i>Epilobium ciliatum</i>	Hairy willow-herb	FACW
ERE SET	<i>Eremocarpus setigerus</i>	Turkey mullein	N/L
HOL VIR	<i>Holcarpha virgata</i>	Sticky tarweed	N/L
JUN EFF	<i>Juncus effusus</i>	Soft rush	OBL
LAC SER	<i>Lactuca serriola</i>	Prickly lettuce	FAC
LOL MUL	<i>Lolium multiflorum</i>	Ryegrass	FAC*
LYT HYS	<i>Lythrum hyssopifolium</i>	Hyssop loosestrife	FACW
PLA STI	<i>Plagiobothrys stipitatus</i>	Slender popcorn-flower	OBL
POL ARE	<i>Polygonum arenastrum</i>	Prostrate knotweed	FAC
POL PER	<i>Polygonum persicaria</i>	Lady's thumb	FACW
POL MON	<i>Polypogon monspeliensis</i>	Annual rabbit-foot grass	FACW+
POP FRE	<i>Populus fremontii</i>	Fremont's cottonwood	FAC+*
RUM CON	<i>Rumex conglomeratus</i>	Clustered dock	FACW
RUM CRI	<i>Rumex crispus</i>	Curly dock	FACW-
RUM PUL	<i>Rumex pulcher</i>	Fiddle dock	FAC+
SAL GOO	<i>Salix gooddingii</i>	Goodding's black willow	FACW
SON ASP	<i>Sonchus asper</i>	Prickly sowthistle	FACU
TAE CAP	<i>Taeniatherum caput-medusae</i>	Medusahead grass	N/L
TRI HIR	<i>Trifolium hirtum</i>	Rose clover	N/L
TYP LAT	<i>Typha latifolia</i>	Broad-leaf cattail	OBL
TYP spe.	<i>Typha species</i>	Cattail	OBL
VIC spe.	<i>Vicia species</i>	Vetch	-

## **Indicator Status Codes**

**OBL** = Obligate Wetland; occur almost always (estimated probability >99%) under natural conditions in wetlands.

**FACW** = Facultative Wetland; usually occur in wetlands (estimated probability 67%-99%) under natural conditions in wetlands.

**FAC** = Facultative; equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).

**FACU** = Facultative Upland; usually occur in non-wetlands (estimated probability 67%-99%).

**UPL** = Obligate Upland; occur almost always (estimated probability >99%) in non-wetlands in the region specified.

**N/L** = Not Listed.

**NI** = No indicator was recorded for those species for which insufficient information was available to determine a status.

**--** = May or may not occur in wetlands depending upon species.

A positive (+) sign indicates a frequency toward the higher (more frequently found in wetlands) end of the facultative categories.

A negative (-) sign indicates a frequency toward the lower (less frequently found in wetlands) end of the facultative categories.

An asterisk (\*) indicates a tentative assignment based upon limited information or conflicting review.





## APPENDIX C

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Wetland Delineation

NOT INCLUDED



## **ATTACHMENT B**

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### Section 7 Consultation Information



**Information to Support Section 7 Consultation  
Whispering Creek Project, Placer County, California  
March 12, 2003**

This document outlines potential impacts and proposed mitigation for potential impacts to vernal pool fairy shrimp (*Branchinecta lynchi*) and other potentially occurring federally listed vernal pool species on the Whispering Creek project site in Placer County.

## **PROJECT LOCATION**

The Whispering Creek property is a 36-acre undeveloped parcel within unincorporated western Placer County, west of Cook-Riolo Road and east of Walerga Road. The subject property is bounded on the south by the Placer/Sacramento County line and single family-homes that front Meandering Way, on the west by undeveloped lands and rural residences, on the north by PFE Road, and on the east by Oly Lane and rural residences. This site corresponds to a portion of Section 17 of Township 10 North, Range 6 East of the Citrus Heights, California 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey) (Figure 1). This location is not within the recently proposed Critical Habitat for the vernal pool fairy shrimp.

## **PROJECT DESCRIPTION**

The following is a description of the action to be considered:

The proposed project involves the development of 57 single-family lots with a recreational area, and will preserve two open space areas surrounding wetlands (1.048 acres of seasonal wetland and 0.070 acre of seasonal marsh) and waters (0.355 acre of intermittent drainage) and totaling approximately 6.97 acres (Figure 2, *Proposed Impacts and Preservation Plan*). It will be necessary to place three road crossings and several outfalls within this preserve area. There are approximately 0.003 acre of seasonal marsh and 0.015 acre of intermittent drainage located within an easement held by the Sacramento Municipal Utility District. These wetlands/waters have been classified as "avoided", as they are not subject to long-term preservation.

## **LISTED SPECIES/CRITICAL HABITAT**

The following is a description of the listed species or critical habitat that may be affected:

Although considered unlikely due to its hydrologic connection to a drainage feature, the seasonal wetland (depicted in Figure 3) could be considered potential habitat for vernal pool fairy shrimp (*Branchinecta lynchi*) and/or the vernal pool tadpole shrimp (*Lepidurus packardii*). However, the project site is not located within recently proposed Critical Habitat for the vernal pool fairy shrimp.

## IMPACTS TO LISTED SPECIES/CRITICAL HABITAT

The following is a description of the manner in which the action may affect listed species:

A total of 0.007 acre of what we have identified as potential habitat for federally listed species (seasonal wetland), would be directly impacted by project construction. The impacts will be due to grading and paving. There are no other potential habitat areas within the project area.

**Table 1. Proposed Impacts to Federally Listed Species Habitat**

<u>Type</u>	<u>Existing Habitat</u>	<u>Proposed Impacted Habitat</u> <i>Direct</i>
Wetlands		
Seasonal Wetland	<u>0.007</u>	<u>0.007</u>
<b>Total:</b>	<b>0.007</b>	<b>0.007</b>

Regarding cumulative impacts, which are defined as those impacts for future state, local and private actions affecting endangered and threatened species that are reasonably certain to occur the action area; we are unaware of any future action that would be likely to preclude the survival and recovery of the vernal pool fairy shrimp and/or vernal pool tadpole shrimp.

For impacts to potential habitat for federally listed species habitat (Figure 3), the applicant proposes to assume presence and to purchase mitigation credits at an agency-approved mitigation bank, as outlined below.

**Table 2. Proposed Preservation and Creation Acreages for Proposed Impacts to Federally Listed Species Habitat**

<u>Wetland Type</u>	<u>Proposed Mitigation<sup>1</sup></u>	
	<u>Creation</u> <u>1:1 (Direct)</u>	<u>Preservation</u> <u>2:1 (Direct)</u>
Seasonal Wetland	<u>0.007</u>	<u>0.014</u>
<b>Total:</b>	<b>0.007</b>	<b>0.014</b>

<sup>1</sup> All impacts to federally listed species habitat (whether vernal pool or drainage swale) are to be mitigated by the purchase of vernal pool credits.

## HABITAT

Listed species or Critical Habitat may be directly impacted due to fill of a seasonal wetland area.

## **REPORTS**

The following is a summary of reports that have been prepared for the site:

There have been no written reports prepared for this site beyond the information provided in the "*Dry Creek West Placer Community Plan Environmental Impact Report*". A copy of the Vegetation/Wildlife discussion for this report is provided as Attachment A, to this Attachment B of the Pre-Construction Notification.

## **OTHER INFORMATION**

The following is other relevant information regarding the action, the listed species, or the critical habitat:

The project site is not located within recently proposed Critical Habitat for the vernal pool fairy shrimp. No elderberry shrubs are known to occur at the site; therefore no impacts to the federally listed Valley elderberry longhorn beetle are anticipated.





## **ATTACHMENT A**

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### Dry Creek West Placer Community Plan Environmental Impact Report Vegetation/Wildlife Discussion



## CHAPTER 12. VEGETATION/WILDLIFE

### Setting

Vegetation mapping was derived from information prepared by the Soil Conservation Service in cooperation with the Placer County Resource Conservation District, and wetlands mapping was prepared by the U.S. Department of Interior, Fish and Wildlife Service. A general wildlife field reconnaissance was conducted with Mr. Dale Whitmore, Wildlife Biologist for the State Department of Fish and Game. Mapped vegetation categories consist of the following:

### IRRIGATED CROPLAND

#### Vegetation

This use includes all lands that are irrigated for crop production including field crops (rice and other small grains), fruit, vineyards, nuts and berries.

#### Wildlife

the wildlife habitat value of cropland depends on the type of crop, pesticide use, farming practices, and surrounding habitats and land uses. In general, row crops offer some food and cover for wildlife but usually have a lower habitat value than other types of cropland.

Orchards provide very little cover for small mammals because herbaceous vegetation is usually removed. Many bird species, however, including the mourning dove, northern mockingbird, scrub jay, and northern flicker, can feed, nest, or roost in orchards.

Seed crops, such as rice, wheat, corn, milo, and safflower, provide food for various birds, including waterfowl, ring-necked pheasants, and mourning doves, and small mammals, such as California ground squirrels, California voles, and deer mice. When these fields have been harvested and cover is low, raptors such as black-shouldered kites and red-tailed hawks prey on the small mammals. Fence row cover along the undeveloped edges of these fields provides additional wildlife habitat.

### IRRIGATED HAY AND PASTURE

#### Vegetation

Haylands are arable lands managed for the production of forage crops that are machine harvested. These crops may be grasses, legumes, or a combination of grasses and legumes.

Pastureland is land used primarily for producing, or native forage plants for livestock grazing. Pastureland may consist of single species in a pure stand, grass mixture, or a grass-legume mixture. Cultural treatment in the form of fertilization, weed control, reseeding, or renovation is usually a part of pasture management in addition to grazing management.

#### Wildlife

wildlife diversity is similar to that described under irrigated cropland. After these lands have been plowed, however, habitat, except along fencelines, is eliminated, and wildlife is temporarily displaced.

### DRY CROPLAND

#### Vegetation

Lands where gravity flow irrigation water is not available. These lands are cropped to wheat and oats with the oats usually being cut as a hay crop.

#### Wildlife

Wildlife diversity is similar to that described under irrigated cropland.

### GRAZELAND

#### Vegetation

Grazeland is non-irrigated pasture or rangeland predominantly used for livestock grazing. Non-Native grasses, including soft chess, ripgut brome, red brome, foxtail barley, and wild oats dominate the annual grassland vegetation. Codominant grassland forbs include filaree, bur-clover, clover, and fiddleneck.

#### Wildlife

Grazed grasslands are preferred by a few species, such as the California ground squirrel, killdeer, and horned lark. The annual grasslands provide important foraging habitat for numerous avian species, including western bluebird, loggerhead shrike, red-tailed hawk, and black-shouldered kite. The foraging value of the annual grasslands is enhanced for many species because this habitat type is close to mixed riparian and oak woodland habitats, where suitable nesting and roosting cover is available. Shrubs, trees, and small rock outcrops scattered throughout the annual grasslands provide perch sites.

Cracks and crevices in the small rock outcrops provide cover for reptiles, such as the western fence lizard and western rattlesnake.

Stock ponds provide drinking, foraging, and bathing opportunities in the annual grasslands for species, such as the Pacific treefrog, dark-eyed junco, and striped skunk.

## RIPARIAN AND WOODLAND

### Vegetation

The plan area contains habitat that possibly supports two different riparian associations: mixed riparian and valley oak riparian. Mixed riparian woodland occurs primarily along creek drainageways and is characterized by a narrow strip of trees and shrubs. The dominant overstory vegetation includes cottonwoods, willows, white alder, box elder, oregon ash, western sycamore, blue elderberry, and valley oak. The understory layer is comprised of shrubs characteristic of the general geographic region. Dominants include arroyo willow, sandbar willow, buttonbush, wild rose, and saplings of overstory species. (A more complete listing of vegetation species, common to the Plan area is contained in Appendix E).

### Wildlife

The riparian woodlands are one of the most important wildlife habitats. Like the oak woodland, the mixed riparian habitat provides a multitiered canopy. The various structural tiers are used by a diverse group of avian species to satisfy their life requisites. The valley oak riparian woodlands typically do not have as extensive a shrub layer as the mixed riparian stands. Snags, large living cottonwoods, white alders, and valley oaks provide nesting and foraging habitat for a diversity of woodpecker species, including the acorn woodpecker, northern flicker, Nuttall's woodpecker, downy woodpecker, and red-breasted sapsucker. (A more complete listing of wildlife species common to the Plan area is contained in Appendix F).

Riparian overstory trees provide possible nesting and roosting habitat for species, such as the red-tailed hawk and Swainson's hawk that forage primarily in the annual grasslands.

Berries produced by many of the shrubs in the diverse understory of the mixed riparian woodlands provide an important winter food source for various wildlife species. Dense, continuous shrub thickets, such as those formed by Himalaya-blackberry, provide protection from predators for species, such as the California quail and rufous-sided towhee.

The valley elderberry longhorn beetle (species) is a probable resident in the area as elderberry shrubs are common. the beetle has been recorded along the Feather River several miles north of the Plan area.

The giant garter snake is a California-listed Threatened Species. It is the most aquatic of garter snake and is confined to areas around permanent fresh water. Several specimens have been found along nearby canals.

Dry Creek provides not only a source of drinking water for wildlife, but also possible feeding, breeding, and resting habitat for various reptiles and amphibians, including the western aquatic garter snake, California newt, and bullfrog.

Adult chinook (king) salmon ascend Dry Creek in October - December depending on when the fall rains increase run-off and decrease water temperatures to attract them. Salmon spawn in Dry Creek through Roseville and in the tributary streams upstream from Roseville. Eggs are in the gravel for about 50 days. Fingerlings rear in the stream until they are about three inches long when they smolt and swim downstream to the ocean.

Ducks, American robins, black phoebes, mourning doves, gray squirrels, opossums, raccoons, striped skunks, shrews, coyotes, black tail deer, gray foxes, and Pacific treefrogs are among the diverse group of species that could occur in the riparian woodlands.

#### URBAN AREA

##### Vegetation

These developed land are typically devoid of most native vegetation and landscaped primarily with ornamental plant species.

##### Wildlife

The trees and shrubs used in residential landscapes attract wildlife species that are able to tolerate human disturbance, exploit human food resources, or use man-made structures for nesting and roosting. The house finch, mourning dove, scrub jay, northern mockingbird, Brewer's blackbird, American robin, deer mouse, and introduced species, including the European starling, House sparrow, and House mouse, find suitable habitat within this area.

#### RURAL/URBAN AREA

##### Vegetation

Lands which are used primarily for residences and various types of agricultural pursuits including animal husbandry and small livestock farming. Vegetation ranges from introduced ornamentals to irrigated pasture and dryland grazing.

## Wildlife

Domestic pets limit habitat acceptability to species tolerant of human presence. Pocket gopher, Scrub jay, White crowned sparrow, Common kingsnake and Western fence lizard are likely to frequent this area.

## VERNAL POOLS

A detailed vernal pool study of the plan area was not conducted. Information prepared by Dr. Robert F. Holland for the California Native Plant Society indicates the majority of land within the plan area has a low probability of containing vernal pools. This coupled with the intensive agricultural activities (including plowing and land leveling) ongoing within the area supports the contention that vernal pools are limited in distribution.

One vernal pool within the plan area has been identified on a previously proposed project, "Casa Grande". The project was located on the south side of Vineyard Road between Crowder and Cook Riclo Road.

## Vegetation

"The site's existing vernal pool occurs roughly 1,000 feet east of the property's western edge, and halfway between the site's north and south boundaries. It consists of approximately one-third of an acre of seasonally flooded ground within an area of typical grazed annual grassland. During the original survey in late February, the water formed a small pond approximately one foot deep, and contained a dense floating mat of aquatic vegetation and an extensive tadpole population. Most of the plant species growing in and around the pond could not be positively identified at this time, but tentative identifications for this site include mudwort (Limosella aquatic), Callitriche longipedunculata, and a coyote thistle (Eryngium articulatum). These three plants are good vernal pool or aquatic habitat indicators. It is likely that additional vernal pool taxa are also present, but were not observed because of the early date of the survey, and consequently the premature phenology of the plants in such a habitat. As the season progresses and the weather becomes warmer, the pond's water should recede, fostering the development of other species as yet undetected. Other moist site taxa include ranunculus mivcatus, plagiobothrys stipitata var. micransa, bois du valia sp. stricta, deschampsia danthonioides, juncus bufonias, briza minor."

## Wildlife

Historically, the emphasis of research has focused on the more conspicuous assemblage of plant species which are unique to the

vernal habitat, and consequently little is known about the invertebrate populations which occur within the pool environments. Except for the Delta green ground beetle (*Elaphrus viridis*), which is classified as threatened by the Fish and Wildlife Service, no invertebrate species associated with vernal pool habitat are classified as rare, threatened, or endangered by the Fish and Wildlife Service, and no species are included on any candidate list for future consideration. The Delta green ground beetle is presently only known to occur in Solano County in conjunction with large vernal pools on pescadero soils. No beetles have been reported in the Sacramento region, and the type of pools which occur in the Roseville area are not consistent with the known habitat of the beetle.

Predominant invertebrates which occur in vernal pools include crustaceans and insects. Common crustaceans which have been reported (FWS, 1987) include fairy shrimp, water fleas, clam shrimp, seed shrimp, and rotifers. A more complete listing of crustacean species is appended to this report.

Similar to crustaceans, numerous types of insects are supported by vernal pool habitat. The predominant insects identified in vernal pools (FWS, 1987) include dragonflies, water beetles, mosquitoes, mayflies, water bugs, water boatman, water striders, and back swimmers.

#### WETLANDS

Three types of wetlands occur in the plan area: freshwater marshes, seeps, small reservoirs and ponds. Marsh and seep habitats are of special importance because of their value to dependent wildlife and plants and because of the scarcity of these habitats.

Some wetlands that fall under the jurisdiction of the U.S. Army Corps of Engineers (COE) under the federal Clean Water Act are seasonal wetlands. Such areas can be dry most of the year. Such sites are recognizable from the types of plants (wetland plants) that dominate the site, the hydric soils (soils that were developed in water-saturated conditions), and inundation or saturation for seven days a year during the growing season. Seasonal wetlands may appear to be ordinary grasslands to the casual observer. Inspection of sites for wetland characteristics must be undertaken by qualified botanists or wetland scientists trained in the COE methodology.

#### Vegetation

Freshwater marshes are characterized by year-round surface or subsurface water that supports a herbaceous flora of emergent aquatic vegetation. This habitat is dominated by cattails and tules, while associated vegetation can include rushes, smartweed, curly dock, and ludwigia.



Seeps probably occur on hillsides in annual grasslands and blue oak woodlands. Seeps have vegetation similar to that found in marshes but lack cattails and tules. The vegetation is dominated by various annual grasses (e.g., rabbits-foot and foxtail grasses) and a mix of forbs, such as curly dock, smartweed, cut-leaved geranium, and watercress.

The land surrounding small reservoirs and ponds typically provides habitat for riparian-dependent species, such as willows, cottonwoods, rushes, tules, and a host of other mesic-adapted herbaceous flora and shrubs. Aquatic plants are also probably present. Communities vary in species composition from site to site, depending on conditions provided by each microenvironment.

### Wildlife

Freshwater marshes and seeps are among the most important wildlife habitats in the DC-WPCP area, particularly for those species that are wetland dependent. The total acreage of wetland habitats has been reduced considerably at both the regional and statewide levels.

Seeps and seasonal marshes provide drinking, foraging, and bathing opportunities for wildlife although standing water may not be available year round.

The perennial freshwater marshes and ponds provide standing water in which bullfrogs, Pacific treefrogs, and possibly California red-legged frogs breed. These species are preyed on by aquatic and common garter snakes, great blue herons, and raccoons. The cattails and other emergent vegetation typical of perennial freshwater marshes provide foraging perches for black phoebes and nesting sites for marsh wrens and red-winged blackbirds. The submergent vegetation and aquatic invertebrates of the perennial freshwater marshes and ponds are fed on by waterfowl.

### Impact

#### AGRICULTURAL LANDS

Implementation of the DC-WRPC will result in development pressure to convert existing agricultural uses to various types of developed lands. The loss and conversion of agricultural lands represents a significant adverse impact. Corresponding displacement of wildlife is also a significant adverse impact.

#### RIPARIAN AND WOODLAND

### Vegetation

Implementation of the Draft DC-WRPC would result in the loss of riparian woodlands. Because riparian woodlands are scarce lo-

cally and throughout the state and because dependent wildlife, any loss of riparian habitat is of concern. Because riparian woodland occurs throughout the eastern half of the plan area, the extent of impacts needs to be determined on a site-by-site basis.

#### Wildlife

Implementation of the Draft DC-WRCP would result in the degradation of wildlife habitat in the riparian woodlands and lead to increased human disturbance of riparian wildlife. This impact is considered significant and unavoidable.

#### URBAN AND RURAL/URBAN

Implementation of the DC-WRCP is not expected to significantly impact either vegetation or wildlife within either of these categories since they are already developed areas.

#### VERNAL POOLS

Implementation of the DC-WRCP could result in the loss of previously unidentified vernal pools. To reduce this potentially significant impact to a less-than-significant level, site specific field studies should be conducted to document locations of and preserve priority vernal pools on individual development sites.

#### WETLANDS

Implementation of the Draft DC-WPCP would result in the loss of wetlands, including freshwater marshes, seeps, and ponds. This impact is considered significant and unavoidable. To reduce this impact, but not to a less-than-significant level, adopt and implement a riparian and wetlands protection ordinance, require site-specific surveys prior to development to delineate wetlands in the DC-WPCP area, coordinate all development proposals involving wetlands with the California Department of Fish and Game, U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service, and establish a no-net-loss policy requiring preservation of all wetlands sites or preservation of priority wetlands and compensation for wetland losses.

#### Mitigation Measures

##### Goals Incorporated into the Draft DC-WRCP

The Draft DC-WRCP incorporates the following goals designed to protect vegetation, wildlife, and aquatic resources.

- GOAL 10: THIS PLAN STRIVES TO PRESERVE THE NATURAL LAND FORMS, NATURAL VEGETATION, AND NATURAL RESOURCES OF THE AREA AS MUCH AS POSSIBLE, WHILE ALSO RECOGNIZING THE DELETERIOUS EFFECT OF INTENSE DEVELOPMENT IN THE SURROUNDING AREAS.
- GOAL 14: IT IS A GOAL TO MAINTAIN THE HEAVILY VEGETATED CORRIDORS THAT EXIST ALONG CIRCULATION ROUTES TO PRESERVE THEIR RURAL NATURE.
- GOAL 17: A MAJOR GOAL OF THE PLAN IS TO UTILIZE AND IMPROVE THE DRY CREEK ENVIRONS AS A FOCAL POINT OF THE NEIGHBORHOODS TO BE CREATED IN THE AREA THROUGH THE PLACEMENT OF PARK FACILITIES, ROADWAYS, TRAILS, INTERPRETIVE AREAS AND VISIBILITY, ETC.
- GOAL 31: RECOGNIZE THE DRY CREEK FLOODPLAIN AS A PUBLIC RESOURCE TO BE MANAGED AND MAINTAINED FOR THE PUBLIC'S BENEFIT.
- GOAL 39: PROVIDE FOR THE PROTECTION OF RARE, THREATENED AND ENDANGERED SPECIES AND THE HABITAT WHICH SUPPORTS THOSE SPECIES.
- GOAL 40: CONSERVE THE QUALITY OF ALL HABITATS WHICH SUPPORT THE ENVIRONMENT OF FISH AND WILDLIFE SPECIES SO AS TO MAINTAIN POPULATIONS AT SUSTAINABLE LEVELS.
- GOAL 42: SAFEGUARD AND MAINTAIN NATURAL WATERWAYS TO ENSURE WATER QUALITY, SPECIES DIVERSITY AND UNIQUE HABITAT PRESERVATION.
- GOAL 43: IDENTIFY ALL ECONOMICALLY VALUABLE RESOURCES, INCLUDING MINERAL DEPOSITS, SOILS CONDUCTIVE TO AGRICULTURAL USES, AND THOSE OPEN SPACE AREAS WHICH ADD TO THE ATTRACTIVENESS OF THE REGION AND ARE VITAL TO ITS DEVELOPMENT AS A RURAL RESIDENTIAL COMMUNITY.
- GOAL 45: RECOGNIZE AGRICULTURAL LANDS AS A RESOURCE AND SEEK TO PROTECT THESE AREAS FROM URBAN ENCROACHMENT.
- GOAL 46: RECOGNIZE THAT CLEAN AIR AND WATER ARE ESSENTIAL RESOURCES FOR MAINTAINING A HIGH QUALITY OF LIVING, AND ENSURE THAT THESE RESOURCES ARE MAINTAINED AT ACCEPTABLE LEVELS.
- GOAL 47: TO PRESERVE AND ENHANCE OPEN SPACE LANDS TO MAINTAIN THE NATURAL RESOURCES AND RURAL CHARACTERISTICS OF THE AREA.
- GOAL 48: TO PROTECT AND PRESERVE OPEN SPACES VITAL FOR WILDLIFE HABITAT AND OTHER AREAS OF MAJOR OR UNIQUE ECOLOGICAL SIGNIFICANCE.

- GOAL 49: TO PROTECT THE NATURAL BEAUTY AND RESOURCES OF THE NATURAL TERRAIN AND VEGETATION.
- GOAL 50: TO CONSERVE AND ENHANCE THE UNIQUE NATURAL ENVIRONMENT AND OPEN SPACE OF THE AREA AND TO MINIMIZE DISTURBANCE OF THE NATURAL TERRAIN BECAUSE THESE ARE UNIQUE AND VALUABLE ASSETS FOR THE DRY CREEK WEST PLACER COMMUNITY PLAN AREA, PLACER COUNTY AND THE COUNTIES THAT BORDER THE AREA.
- GOAL 51: PRESERVE OUTSTANDING AREAS OF NATURAL VEGETATION INCLUDING, BUT NOT LIMITED TO OAK WOODLANDS, RIPARIAN AREAS AND VERNAL POOLS.
- GOAL 52: TO CONSERVE THE VISUAL RESOURCES OF THE COMMUNITY, INCLUDING THE IMPORTANT VISTAS AND WOODED AREAS, AND IN PARTICULAR, THE RIPARIAN HABITAT OF DRY CREEK AND ITS INTERMITTENT STREAMS AND NATURAL DRAINAGE CHANNELS WHICH ARE IMPORTANT IN PROVIDING LOW COST NATURAL FLOOD CONTROL.
- GOAL 53: PROVIDE FOR THE PROTECTION OF RARE, THREATENED AND ENDANGERED SPECIES AND/OR THE HABITAT WHICH SUPPORTS THESE SPECIES.
- GOAL 54: TO PERMIT EXISTING AGRICULTURAL USES TO CONTINUE, AND TO CONSERVE LANDS SUITABLE FOR AGRICULTURAL USES WHILE ALLOWING URBAN/SUBURBAN/RURAL RESIDENTIAL USES IN OTHER AREAS.

#### Ordinances Already Required by Placer County

##### Continue to Implement the Leash Law

Placer County should continue to implement the leash law (Ordinance 3.60).

#### Mitigation Measures Recommended by the Draft EIR

##### Adopt and Implement a Tree Ordinance for the DCWP Area

Placer County should adopt and implement an ordinance that would require the preservation of the oak woodland and important tree resources.

Key issues in the tree preservation ordinance are identifying and cataloging all oak trees prior to development of a site plan, requiring developers to apply for a permit to remove oak or other important trees, requiring developers to submit a compensation plan for all trees approved for removal, and requiring developers to incorporate existing trees into their project designs. Project developers should avoid removing large oak trees and stands of significant value to wildlife.

### Land Use Alternatives

The proposed land use alternatives (Plans X, Y, and Z) recognize exiting agricultural uses and valuable riparian/woodland within the community Plan area and have recommended large parcel sizes in the western portion and open space designations along the 100 year floodplain of Dry Creek and its major drainages.



## **ATTACHMENT C**

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Resolution for Dry Creek West Placer Community Plan  
Environmental Impact Report





## Before the Board of Supervisors County of Placer, State of California

In the matter of: A Resolution adopting  
the Dry Creek-West Placer Community  
(General) Plan (GPA-282), Findings  
of Fact and Statement of Overriding  
Considerations

Resol. No: 90-1B1

Ord. No: \_\_\_\_\_

First Reading: May 14, 1990

The following RESOLUTION was duly passed by the Board of Supervisors  
of the County of Placer at a regular meeting held Monday, May 14, 1990  
by the following vote on roll call:

Ayes: Mahan, Ferreira, Hogg, Fluty, Beland

Noes: None

Absent: None

Signed and approved by me after its passage.

Attest:  
Clark of said Board

*Georgia Hake*

*John P. ...*  
Chairman, Board of Supervisors

WHEREAS, the Planning Commission of the County of Placer, State of California, has held public hearings on December 13, 1989; January 17, 1990; February 22, 1990; and March 28, 1990 in the time and manner prescribed by law to consider and make recommendation to the Board of Supervisors on the Dry Creek-West Placer Community Plan.

WHEREAS, the Placer County Environmental Review Committee held a public hearing on the EIR on February 21, 1990.

WHEREAS, the Board of Supervisors of the County of Placer, State of California, has held a public hearing on May 14, 1990 in the time and manner prescribed by law to consider the adoption of the Dry Creek-West Placer Community Plan.

WHEREAS, the Board of Supervisors has considered the recommendations of the Placer County Planning Commission, County staff, local community groups, other public agencies, and oral evidence of all individuals wishing to testify;

WHEREAS, the Board of Supervisors finds that the Dry Creek-West Placer Community Plan conforms to all applicable sections of the California Government Code regarding community plans; and

WHEREAS, an Environmental Impact Report (EIR) was prepared and certified for the Dry Creek-West Placer Community Plan in accordance with the California Environmental Quality Act (CEQA); and

WHEREAS, the EIR indicated several significant environmental effects that would result from approval of the Plan; and

WHEREAS, CEQA and State and County Guidelines adopted pursuant thereto require this Board to make certain findings where the EIR identifies one or more significant effects which would or could result from approval of the Plan; and

WHEREAS, the findings and overriding considerations relied upon by the Board are set forth as follows:

A. FINDINGS:

1. Significant Effect: Implementation of the Dry Creek-West Placer Community Plan will result in a substantial increase in population within the Plan area. (DEIR page 4-1.)

Finding: The Goals and Policies contained within the Community Development Element of the Community Plan will be implemented to deal with population increases. This will reduce the impact, but not to a less than significant level.

2. Significant Effect: Implementation of the Dry Creek-West Placer Community Plan will result in increased traffic volumes that are deemed significant and unavoidable on a regional basis. (DEIR, page 5-28.)

Finding: The Goals and Policies contained within the Transportation and Circulation Element of the Community Plan will be implemented to address Transportation/Circulation issues. The impacts cannot, however, be reduced to a less than significant level on a regional basis.

3. Significant Effect: Implementation of the Dry Creek-West Placer Community Plan will result in additions to an existing region-wide air quality nonattainment situation including additional vehicular emissions in both the plan area and air basin. (DEIR, page 6-3.)

Finding: The final Goal in the Natural Resources Element of the Community Plan and the corresponding Policy are incorporated to protect Air Resources. In addition, compliance with all Air pollution Control District Rules and Regulations will reduce impacts, but not to a less than significant level.

4. Significant Effect: Implementation of the Dry Creek-West Placer Community Plan will increase run-off and add incrementally to regional flooding concerns. (DEIR, page 9-3.)

Finding: Goals and Policies contained within Public Services Element of the Community Plan will be implemented to deal with drainage and flooding concerns. In addition, several programs (Master Drainage Plan, Flood Damage Prevention Ordinance, Grading Ordinance, Land Development Manual, etc.) will be involved in mitigating impacts. On a cumulative basis, however, the impacts cannot be reduced to a less than significant level.

5. Significant Effect: Implementation of the Dry Creek-West Placer Community Plan could degrade the surface and sub-surface water quality due to increased contamination from agricultural pesticides and wastes, from erosion and sedimentation within drainageways, run-off from developed areas and septic tank effluent. (DEIR, page 102.)

Finding: Goals and Policies contained within the Public services Element and the Natural Resources Element will be implemented to decrease impacts on water quality. The impacts on a cumulative basis will still be significant, however.

6. Significant Effect: Implementation of the Dry Creek-West Placer Community Plan will result in loss and conversion of agricultural lands, riparian and woodlands, and wetlands. (DEIR, page 10-07 and 10-8.)

Finding: Goals and Policies contained within the Natural Resources Element and Open Space Element of the Community Plan will be implemented to minimize impacts on Vegetation and Wildlife. Impacts cannot, however, be reduced to a less than significant level on a cumulative basis.

## B. OVERRIDING CONSIDERATIONS

The board has made a reasonable and good faith effort to mitigate potential impacts resulting from this project. The Board has adopted numerous policies, goals, standards, and guidelines to substantially mitigate or eliminate potential

impacts. Changes and alterations to the Plan text and Land Use designations have been adopted which will substantially lessen or avoid significant environmental impacts as identified in the EIR. Additionally, the Board has adopted a Mitigation Monitoring Program for the Plan which outlines how the mitigation measures adopted as part of the Plan will be implemented, monitored, and evaluated.

Notwithstanding the disclosure of impacts identified in the EIR as significant and potentially significant, which have not been eliminated or mitigated to a level of insignificance, the Board acting pursuant to Section 15093 of the State CEQA Guidelines, hereby determines that the benefits of approving the proposed project outweighs the unmitigated adverse environmental impacts.

The Board has considered the public record on the Dry Creek-West Placer Community Plan and finds that the project is in the public interest in that a variety of economic, regional and social benefits from the Plan outweighs all such remaining unavoidable impacts. In particular the project will accomplish the following:

1. The Plan provides a broad framework and policy direction for development of the area.
2. It provides for sound and adequate housing to meet future needs anticipated in current population projections for all expected segments of the community, while ensuring compatibility with existing and proposed land uses.
3. It provides for preservation of the rural-residential character of part of the Plan area, while permitting additional housing, commercial, industrial, and public service uses in other areas.
4. It identifies existing natural resources and develops goals and policies for their preservation and enhancement.
5. It provides for orderly growth in conjunction with necessary expansion of infrastructure.

Furthermore, the adopted Plan is environmentally superior to the No-Project alternative (1967 Placer County General Plan) as documented in the EIR and therefore less impactful overall on the community environment.

WHEREAS, the Board of Supervisors recognizes that the Dry Creek-West Placer Community Plan amends the Placer County General Plan.

WHEREAS, the Board of Supervisors finds that the Dry Creek-West Placer Community Plan is a comprehensive, long-term plan for the physical development of the area which will serve to protect and enhance the health, safety, peace, and general welfare of the residents of the Plan area and the County of Placer as a whole.

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NOW, THEREFORE, BE IT RESOLVED, that the Dry Creek West Placer Community (General) Plan is hereby adopted as shown in Exhibit A attached hereto and incorporated herein by reference.

Note: REA-804 - Rezoning amending Placer County Code, Chapter 30, Maps 6D, 3C and 3D was adopted at the same time as this General Plan Amendment.

BEFORE THE BOARD OF SUPERVISORS  
COUNTY OF PLACER, STATE OF CALIFORNIA

Resol. No: 94-238

In the matter of: A RESOLUTION TO AMEND THE  
DRY CREEK/WEST PLACER COMMUNITY PLAN  
TO INCLUDE THE WEST PLACER SPECIFIC PLAN  
AREA (GPA-299)

First Reading: \_\_\_\_\_


The following Resolution was duly passed by the Board of Supervisors of the County of Placer  
at a regular meeting held August 16, 1994, by the following vote  
on roll call:

Ayes: Ozenick, Lichau, Uhler, Ferreira

Noes: Bloomfield

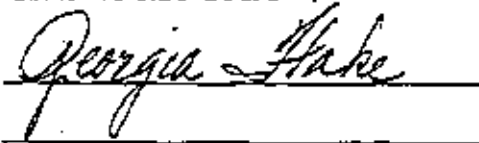
Absent: None

Signed and approved by me after its passage.

  
Chairman, Board of Supervisors

Attest:

Clerk of said Board

  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THE BOARD OF SUPERVISORS OF THE COUNTY OF PLACER, STATE OF  
CALIFORNIA, DOES HEREBY RESOLVE:

WHEREAS, the Planning Commission and Board of Supervisors held public hearings as  
specified in the Resolution adopting the Placer County General Plan; and

WHEREAS, as a part of adoption of the Placer County General Plan, the Planning  
Commission and Board of Supervisors considered amendments to the Dry Creek/West Placer

Community Plan; and

WHEREAS, the Board of Supervisors has considered the recommendations of the Placer County Planning Commission, County staff, local community groups, other public agencies, and all members of the public who testified or submitted written comments; and

WHEREAS, the Board of Supervisors finds that this amendment to the Dry Creek/West Placer Community Plan conforms to all applicable sections of the California Government Code regarding general and community plans; and

WHEREAS, an Environmental Impact Report was prepared and certified for the Placer County General Plan in accordance with the California Environmental Quality Act (CEQA); and

WHEREAS, the Board of Supervisors certifies that the Placer County General Plan Environmental Impact Report adequately addresses this amendment to the Dry Creek/West Placer Community Plan; and

WHEREAS, CEQA and State and County Guidelines adopted pursuant thereto require this Board to make certain findings where the EIR identifies one or more significant effects which would or could result from approval of the Plan; and

WHEREAS, the findings and overriding considerations relied upon by the Board are set forth in the certification and adopted findings done for the Placer County General Plan; and

WHEREAS, the Board of Supervisors finds that this amendment to the Dry Creek/West Placer Community Plan provides a comprehensive, long-term plan for the physical development of the area which will serve to protect and enhance the health, safety, peace, and general welfare of the residents of the Plan area and the County of Placer as a whole.

NOW, THEREFORE, BE IT RESOLVED that the Dry Creek/West Placer Community Plan is hereby amended to include the West Placer Specific Plan Area. This amendment, as shown in Exhibit I attached hereto, and incorporated herein by reference, includes standards for development in the specific plan area and changes to the text as well as amendments to all of the exhibits and the community plan land use diagram to reflect the specific plan area.

NOTE: REA-839 was adopted concurrently with this Resolution.

## Exhibit 1

*The following discussion is to be added to the Dry Creek/West Placer Community Plan to address the area generally west of Watt Ave and south of Baseline Road. The Community Plan Land Use diagram and all appropriate exhibits will also be amended to designate the area as the West Placer Specific Plan Area. Additional minor text changes shall be made elsewhere in the Plan to reflect this amendment.*

The West Placer Specific Plan Area is located in the southwest corner of unincorporated Placer County, adjacent to the Sacramento and Sutter County lines and is the western-most half of the Dry Creek/West Placer Community Plan area. The Specific Plan Area is approximately four miles west of Roseville and 10 miles north of the City of Sacramento. The site is approximately 5,150 acres. The plan area is envisioned as a mixed-use community including residential, retail commercial, and business/professional uses, as well as public facilities such as parks, schools, and open space. This Specific Plan area was identified in the Dry Creek/West Placer Community Plan (1990) as an area to be examined as part of the Countywide General Plan Update and that update resulted in this designation for the area.

The West Placer Specific Plan Area shall be subject to the following development standards:

1. Residential uses: A maximum of 14,132 dwelling units, although this number may not be realized due to site constraints, inclusion of buffers, and other factors that may limit developable land.
2. Commercial and industrial uses: The following acreage shall serve as approximations of an acceptable mix of on-residential uses: a maximum of 80 acres of commercial, 160 acres of office and professional development, and up to 300 acres of professional/light industrial development.
3. Open space: Open space shall be provided for drainageways, floodplains, recreation areas, parks, undeveloped buffers, trail corridors, and natural areas.
4. Required buffers: Proposed development within the West Placer Specific Plan Area shall incorporate the following land use buffers, according to the standards of buffer zones contained in the Placer County General Plan, Part I (page 19).
  - Agricultural/Timberland
  - Industrial/Residential
  - Sensitive Habitat

In addition, the project shall include elements in its design which provide buffers between urban areas within the boundaries of the Specific Plan Area and rural residential development in Sacramento County.

5. Transit: A public transit system shall consist initially of an express bus system and dedication of right-of-way corridor for possible future light rail transit with



a feeder bus network.

6. Urban design: Development within the West Placer Specific Plan Area shall be planned and designed to comply with the following standards:

- a. Urban form. The specific plan and project plans for development shall provide for up to two mixed use, pedestrian-oriented village or towns and a single, larger town center. Village areas should be surrounded by buffer lands, low density single-family residential, and/or regional employment and commercial. Mixed use (commercial, professional office, and high density residential) nodes, commercial centers, and regional employment areas are to be established at sufficient densities to support express bus transit service between adjoining villages and nearby urban centers (e.g., other new growth areas or incorporated cities). Each village should contain all public facilities and services necessary for its development.
- b. Town center. The Specific Plan Area should contain one large town center that will operate as the institutional and social focal point of the community. The town center is to contain, at a minimum: a community meeting facility; formal outdoor gathering areas (e.g., amphitheaters); and the main offices and facilities for law enforcement, fire library, and other public services. Public, quasi-public, and institutional facilities should be centrally located in the town center.
- c. Village core areas. Mixed-use commercial core areas should be developed to provide service and neighborhood commercial needs, professional services, public, quasi-public, and institutional facilities, and high-density residential uses. Village core areas shall contain transit services to connect to nearby village areas, commercial centers, and regional employment areas, and to destinations beyond the boundaries of the Specific Plan Area.
- d. Public gathering areas. Commercial areas within town centers and village core areas shall be enhanced by incorporating outdoor public gathering areas into their design. Such areas are intended to facilitate social interaction by area residents and employees.
- e. Community open space areas. Each village area should contain a village green to be located adjacent to, or integrated into, the village core area. Community parks should be located adjacent to major open space and roadway corridors (see items i. and j. below). Community parks may serve as buffer areas between conflicting land uses (See the standards for Land Use Buffer Zones in the Placer County General Plan in Part I, page 19), within or adjacent to the specific plan area. All developed and undeveloped park areas should be linked by a system of greenways and parkways containing pedestrian and bicycle paths separated from vehicular

traffic.

- f. Pedestrian-oriented design. Town center, village core, and regional employment areas shall be planned and designed to be pedestrian, bicycle, and transit accessible. Design elements that accommodate pedestrian and cyclists should take precedent over elements that primarily accommodate automobiles.

g. Commercial areas:

- (1) New commercial buildings shall be designed to provide maximum pedestrian accessibility. Primary ground floor commercial building entrances should orient to plazas, parks, or pedestrian-oriented streets rather than interior blocks or parking lots. Anchor retail buildings may have their entries from off-street parking lots; however, on-street entries are strongly encouraged.
- (2) Street-level windows and numerous building entries are encouraged in town centers and village core areas. Arcades, porches, bays, and balconies are encouraged.
- (3) If a wall of a primary commercial establishment does not have an entry on a pedestrian route, it shall include windows, display areas, and/or be lined with retail shops to provide visual interest to pedestrians.
- (4) Entries into small shops and offices shall orient directly onto a pedestrian-oriented street. Buildings with multiple retail tenants should have numerous entries onto the street. Small, single-entry malls should be avoided. Off-street parking should be located the rear of buildings with walkways leading to the street and entry.
- (5) Commercial development shall be designed to provide varied and interesting building facades to provide pedestrian orientation. Buildings designs should provide as much variety as possible without creating a chaotic image. Facades should vary from one building to the next, rather than create an overly unified frontage. Covered walkways should be provided whenever possible.

- h. Residential areas. Residential areas shall consist of the following three types:

- (1) Village Residential. These areas shall be located within walking distance of a village commercial core area. The housing should

consist of high-density single-family (with or without carriage or secondary dwelling units) and multi-family units.

- (2) Single-family Residential. These areas should surround village residential areas at densities consistent with suburban residential development (e.g., 4 to 7 dwellings per acre). Subdivision design should provide opportunities for pedestrian and bicycle access to village core areas. Physical separation of single-family residential areas by such means as sound walls, berms, and major roads should be discouraged. Single-family residential areas should be incorporated into their village so village residential and single-family residential areas function as a single unit and are not separated by physical or design characteristics.
    - (3) Rural Residential. These areas should be located in buffer zones within the specific plan boundaries. Rural land uses shall only be considered in areas where residential land use is consistent with the standards in Part I for buffers (page 19). Rural residential densities of 0.2 dwellings per acre or more shall be allowed only when public sewer and water facilities are provided.
  - i. Open space corridors. Existing and proposed linear open space corridors should be developed as a pedestrian, equestrian, and/or bicycle trail system. Existing corridors include, but are not limited to, stream and riparian areas (e.g., the Dry Creek corridor), power line easements, abandoned rail rights-of-way, existing public trails, and existing public roads and bridges that may be ultimately abandoned. The Dry Creek corridor shall be designed to provide bicycle/equestrian/pedestrian connections to similar facilities in Sacramento County near Gibson Ranch Park.
  - j. Roadway corridors. Collector and arterial roads shall be designed as landscaped corridors, including separated bicycle and pedestrian facilities within landscaped or native open space corridors and landscaped berms and medians.
7. Phasing of Development: Phasing shall maintain a balanced mix of land uses throughout development of the plan area and shall address necessary infrastructure and other relevant issues. Development in the West Placer Specific Plan Area shall be required to proceed in a logical fashion.
  8. Agricultural water supply: Development within the Specific Plan Area should assist in the provision of affordable agricultural water to surrounding agricultural lands. Sources of such agricultural water include reclaimed and retained water

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and newly developed surface water sources.

9. Noise: Development within the Specific Plan Area shall be designed to avoid aircraft noise impacts on noise sensitive uses, resulting from operations at McClellan Air Force Base. No residential land uses shall be permitted in areas which exceed noise levels indicated in Table 9-3, page 122 of the Placer County General Plan.

ref. co.wilddry.crk

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## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846



In reply refer to:  
1-1-03-1-3402

JAN 21 2005

Mr. Thomas J. Cavanaugh  
Chief, Sacramento Valley Office  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, California 95814-2922

Subject: Informal Endangered Species Consultation on the Whispering Creek  
Project (Corps # 200300650), Placer County, California

Dear Mr. Cavanaugh:

This letter responds to your May 9, 2003, request for initiation of formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Whispering Creek Project (proposed project). Your letter was received by the Service on May 13, 2003. The proposed 36-acre project site is located in western Placer County, west of Cook-Riolo Road and east of Walerga Road. The proposed project involves the development of 57 single-family lots with a recreational area and will preserve two open space areas. At issue are the potential effects of the proposed project on the endangered vernal pool tadpole shrimp (*Lepidurus packardii*) and the threatened vernal pool fairy shrimp (*Branchinecta lynchi*). This response is in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act).

The Service has reviewed the proposed project, and included the following in this consultation: (1) the March 12, 2003, *Nationwide Permit 39, Pre-Construction Notification for Whispering Creek (Placer County, California)*, prepared by ECORP Consulting, Inc.; (2) your May 9, 2003, letter requesting formal consultation on the proposed project; (3) a November 3, 2004, site visit conducted by Rick Kuyper of the Service and Hal Freeman of ECORP Consulting, Inc.; (4) the January 7, 2004, *Annual Report of Findings Regarding Wet and Dry Season Surveys for Federally-listed Crustaceans for Whispering Creek, Placer County, California*, prepared by ECORP Consulting; and (5) other information available to the Service.

The Service has determined that the proposed project is not likely to adversely affect the endangered vernal pool tadpole shrimp or the threatened vernal pool fairy shrimp. Pete Balfour of ECORP Consulting conducted protocol-level wet season and dry season surveys for these species within suitable habitat found onsite and no federally-listed species were detected.

TAKE PRIDE  
IN AMERICA 

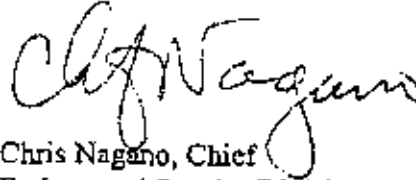
01/28/2005

Mr. Thomas J. Cavanaugh

.2

If you have any questions regarding the proposed Whispering Creek Project, please contact Rick Kuyper or the Acting Sacramento Valley Branch Chief at (916) 414-6645.

Sincerely,



Chris Nagano, Chief  
Endangered Species Division

cc:

Kent Smith, California Department of Fish and Game, Rancho Cordova, California

Bill Brown, Towne Realty, Roseville, California

Hal Freeman, ECORP Consulting, Inc. Roseville, California



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REPLY TO  
ATTENTION OFDEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO  
CORPS OF ENGINEERS  
1325 J STREET  
SACRAMENTO, CALIFORNIA 95814-2922

February 17, 2004

Regulatory Branch (200200767)

Bill Brown  
Towne Realty Incorporated  
775 Sunrise Ave., Suite 270  
Roseville, California 95661

Dear Mr. Brown:

This letter concerns the November 27, 2002, wetland delineation for the proposed Whispering Creek project site submitted to this office for verification on your behalf. This 36-acre site is located in Section 17, Township 10 North, Range 6 East, MDB&M, Placer County, California.

Based on a site inspection conducted by Mr. William Ness of this office on November 25, 2003, we concur with the estimate of waters of the United States, as depicted on the December 16, 2003, revision of the map entitled, *Whispering Creek, Wetland Delineation*. Approximately 1,534 acres of waters of the United States, including wetlands, are present within the surveyed area. These waters are regulated by this office under Section 404 of the Clean Water Act since they are tributary or adjacent to a tributary of the Sacramento River, a navigable water.

Under Section 404 of the Clean Water Act, a Department of the Army (DA) permit is required prior to discharging dredged or fill materials into waters of the United States. The type of permit required will depend on a number of factors, including the type and amount of waters affected by the discharge. For more information on how to obtain a DA permit from our office, please visit our website at <http://www.spk.usace.army.mil/cespk-co/regulatory/>.

This verification is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date. A notice of appeal options is enclosed. You should provide a copy of this to all other affected parties.

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-2-

Please refer to identification number 200200767 in correspondence concerning this project. If you have any questions, please contact Mr. William Ness at our Sacramento Valley Office, 1325 J Street, Room 1480, Sacramento, California 95814-2922, or email William.W.Ness@usace.army.mil, or telephone 916-557-5268. You may also use the Regulatory Permits link on our website: [www.spk.usace.army.mil](http://www.spk.usace.army.mil).

Sincerely,

ORIGINAL SIGNED

Thomas J Cavanaugh  
Chief, Sacramento Valley Office

Enclosure

Copies furnished without enclosure:

George Day, Storm Water and Water Quality Certification Unit, Central Valley Regional  
Water Quality Control Board, 11020 San Center Drive #200, Rancho Cordova,  
California 95670-6114

7 Keith Kwan, Ecorp Consulting, Incorporated, 2260 Douglas Blvd., Suite 160, Roseville,  
California 95661



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COPY

**TOWNE DEVELOPMENT OF SACRAMENTO, INC.**

**WHISPERING CREEK**  
**[36.7 acre: APN #023-260-002]**  
**(Placer County, California)**

**PRELIMINARY ARBORIST REPORT**

Submitted by:

Edwin E. Stirtz  
ISA Certified Arborist WE-0510A  
SIERRA NEVADA ARBORISTS

March 18, 2003





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# SIERRA NEVADA ARBORISTS

March 18, 2003

Mr. Jack Coulter  
Towne Development of Sacramento, Inc.  
775 Sunrise Avenue, Suite 270  
Roseville, California 95661

RE: Arborist Report for Whispering Creek  
Placer County, California

Dear Mr. Coulter:

On March 18, 2003, Sierra Nevada Arborists visited the Whispering Creek (36.7 acre: APN #023-260-002) project site located off PFE Road in Placer County, California. The purpose of this site visit was to inspect and evaluate the native oak trees located within the project site, and to prepare an Arborist Report following the Placer County Tree Preservation Ordinance (Article 12.16, Chapter 12.16.020) which requires an inventory and field identification of any single-trunked native trees 6" DBH or larger, as well as any multi-trunked native trees with an aggregate of 10" DBH or larger. The trees have been identified in the field with round, metal numbering tag which has been affixed to the tree's trunk. For your reference, the numbers utilized in this report correspond to the tree tag affixed to the tree, and those tree numbers have been rough-plotted on the Tentative Subdivision Map provided by Baker-Williams Engineering Group.

The riparian corridor within the Lot D open space contains approximately 30 native and non-native trees. For reference, a row of native trees on the east side of the channel and west of the 50' riparian buffer was inventoried as an edge reference and included within this arborist report.

Thank you for allowing Sierra Nevada Arborists to assist you with this project. Please feel free to give me a call if you have any questions or require additional information.

Sincerely,

Edwin E. Stirtz  
ISA Certified Arborist WE-0510A

EES:ks

Enclosure

cc: Mr. Mike Williams (w/enclosures: rough-plotted map)

TREE#1 Valley Oak ( <i>Quercus lobata</i> )	DIAMETER	:	7 inches
	DRIPLINE RADIUS	:	9 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Road shoulder/grasses
	RECOMMENDATIONS	:	Clean out crown
TREE#2 Valley Oak ( <i>Quercus lobata</i> )	DIAMETER	:	20 inches
	DRIPLINE RADIUS	:	26 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – pruned for utility line clearance
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/road shoulder
	RECOMMENDATIONS	:	Clean out crown
TREE#3 Valley Oak ( <i>Quercus lobata</i> )	DIAMETER	:	45 inches
	DRIPLINE RADIUS	:	40 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown

TREE#4	DIAMETER	:	21 inches
Cottonwood	DRIPLINE RADIUS	:	26 feet
( <i>Populus fremontii</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/seasonal drainage
	RECOMMENDATIONS	:	Clean out crown
TREE#5	DIAMETER	:	3 inches, 6 inches, 7 inches
Pacific Willow	DRIPLINE RADIUS	:	14 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Seasonal drainage
	RECOMMENDATIONS	:	Clean out crown
TREE#6	DIAMETER	:	6 inches, 13 inches
Cottonwood	DRIPLINE RADIUS	:	14 feet
( <i>Populus fremontii</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Seasonal drainage
	RECOMMENDATIONS	:	Clean out crown
TREE#7	DIAMETER	:	6 inches
Pacific Willow	DRIPLINE RADIUS	:	10 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Seasonal drainage
	RECOMMENDATIONS	:	Clean out crown

TREE#8 Cottonwood ( <i>Populus fremontii</i> )	DIAMETER	: 13 inches
	DRIPLINE RADIUS	: 15 feet
	ROOT CROWN	: Fair
	TRUNK	: Fair
	LIMBS	: Fair – above average amount of deadwood
	FOLIAGE	: Fair
	CONDITION	: Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	: Seasonal drainage
	RECOMMENDATIONS	: Clean out crown
TREE#9 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	: 7 inches
	DRIPLINE RADIUS	: 8 feet
	ROOT CROWN	: Fair
	TRUNK	: Fair
	LIMBS	: Fair – above average amount of deadwood
	FOLIAGE	: Fair
	CONDITION	: Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	: Grasses
	RECOMMENDATIONS	: Clean out crown
TREE#10 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	: 4 inches, 5 inches, 5 inches, 6 inches
	DRIPLINE RADIUS	: 14 feet
	ROOT CROWN	: Fair
	TRUNK	: Fair
	LIMBS	: Fair – above average amount of deadwood
	FOLIAGE	: Fair
	CONDITION	: Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	: Grasses
	RECOMMENDATIONS	: Clean out crown



TREE#11 Cottonwood ( <i>Populus fremontii</i> )	DIAMETER	:	19 inches
	DRIPLINE RADIUS	:	21 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/seasonal drainage
	RECOMMENDATIONS	:	Clean out crown
TREE#12 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	:	4 inches, 4 inches, 4 inches, 5 inches, 6 inches, 6 inches, 6 inches
	DRIPLINE RADIUS	:	12 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Seasonal drainage/grasses
	RECOMMENDATIONS	:	Clean out crown
TREE#13 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	:	5 inches, 6 inches, 7 inches
	DRIPLINE RADIUS	:	15 feet
	ROOT CROWN	:	Poor – previously failed
	TRUNK	:	Poor to fair – one stem lying prone on grade
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Poor to fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Seasonal drainage/grasses
	RECOMMENDATIONS	:	Clean out crown

TREE#14	DIAMETER	:	3 inches, 4 inches, 5 inches,
Pacific Willow			5 inches
( <i>Salix lasiandra</i> )	DRIPLINE RADIUS	:	12 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown

### **Specific Inventory Data/Maintenance Recommendations**

Within this specific inventory data you will find the following information:

Tree Number:	Corresponds to aluminum tag attached to the tree.
Species Identification:	Scientific and common species name.
Diameter:	This is the trunk diameter as measured at breast height (industry standard 4.5 feet above ground level).
Dripline radius:	Measurement of the tree's dripline from the trunk to the farthest most branch tip.
Root Crown:	Assessment of the root crown area located at the base of the trunk of the tree at soil level.
Trunk:	Assessment of the tree's main trunk from ground level generally to the point of the primary crotch structure.
Limbs:	Assessment of both smaller and larger branching, generally from primary crotch structure to branch tips.
Foliage:	Tree's leaves.
Overall Condition:	Describes overall condition of the tree in terms of structure and vigor.
Dripline Environment:	Describes area directly beneath the tree (growing environment).
Recommendation:	Specific maintenance requirements.

**CROWN CLEAN OUT:** This shall consist of the removal of all dead, dying, diseased, interfering, objectionable, obstructing, and weak branches, as well as selective thinning to lessen wind resistance.

**DEEP ROOT FERTILIZATION (D.R.F.):** A method employed to induce vigor and stimulate new root growth. This is used as a means of feeding a large tree, as well as deep watering at the same time. Water soluble fertilizers are mixed in water and hydraulically pumped with a probe into the ground, delivering water and nutrients directly to the root zone, allowing for uptake from the tree. In this way, vigor can be improved and new root growth stimulated.

### DEFINITIONS OF TERMS USED IN THIS REPORT

**GOOD** - A tree in this category has no trunk or root crown cavities or injuries; there is no indication of hollowness; no foreign objects are embedded in its structure; the root crown is above grade; there is no decay present except for small stubs; the structure is strong; the trunk is tapers; the bark thickness is normal; there is no fluxing; no fungus is evident; there is a below average amount of dead limbs and twigs present which is normal for the size and age of the species; there is no co-dominant branching present; there are no large callused areas and any small callusing present is vigorous and intact; there are no abnormally heavy insect infestations; the growth rate is and has been average or above; limb weight is not excessive; buds are normal size and viable; the leaf size, color, and density is normal or better; and barring any unforeseen negative effects, the life expectancy should exceed thirty years.

**FAIR** - There is no decay or indications of large hollow areas in the large limbs, root crown, or trunk; a few small callused-over foreign objects, e.g., nails, may be present, the structure is strong; no fungus is evident other than small saprophytes on exposed wood; some small, callusing injuries may be present, some small limbs may be dead and decaying but callus is forming at their base; some excessive limb weight may exist; there may be some minor fluxing; the amount of dead limbs and twigs present is within the normal range; some large callused areas may be present; some small cavities and areas of decay may be present; the growth rate is average or slightly below average; and some leaf size, color, and density may vary.

**POOR** - Significant cavities, dead areas, and decay may be present; the tree is actually defective; fungus fruiting bodies may be present; the amount of dead limbs and twigs is far above normal; major co-dominant branching with embedded bark may be present; buds are small and some may not be viable; leaves may be below average size and may be abnormal in color; significant pest damage may be present; and the predicted structural life and/or viability is less than ten years.

The ratings "good to fair" and "fair to poor" are used to describe trees that fall between the described major categories and have elements of both.

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# SIERRA NEVADA ARBORISTS

## TOWNE DEVELOPMENT OF SACRAMENTO, INC.

JONES PROPERTY  
[APN 023-0260-017]  
(Placer County, California)

### PRELIMINARY ARBORIST REPORT

Submitted by:

Edwin E. Stirtz, Principal Consulting Arborist  
ISA Certified Arborist WE-0510A  
SIERRA NEVADA ARBORISTS

Wayne R. McKee, Consulting Arborist  
ISA Certified Arborist WE-0959A  
SIERRA NEVADA ARBORISTS

May 29, 2003





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# SIERRA NEVADA ARBORISTS

May 29, 2003

Mr. Jack Coulter  
Towne Development of Sacramento, Inc.  
775 Sunrise Avenue, Suite 270  
Roseville, California 95661

RE: Arborist Report for the Jones Property [APN 023-260-017]  
Placer County, California

Dear Mr. Coulter:

On May 29, 2003, Sierra Nevada Arborists visited the Jones Property [APN 023-260-017] project site located off PFE Road in Placer County, California. The purpose of this site visit was to inspect and evaluate the native oak trees located within the project site, and to prepare an Arborist Report following the Placer County Tree Preservation Ordinance (Article 12.16, Chapter 12.16.020) which requires an inventory and field identification of any single-trunked native trees 6" DBH or larger, as well as any multi-trunked native trees with an aggregate of 10" DBH or larger. The trees have been identified in the field with metal numbering tag which has been affixed to the tree's trunk. For your reference, the numbers utilized in this report correspond to the tree tag affixed to the tree, and those tree numbers have been rough-plotted on the map provided by Baker-Williams Engineering Group.

As you will see, two native Pacific Willow (*Salix lasiandra*) trees were found on site. This report also includes data for 16 non-native Blue Gum (*Eucalyptus globulus*) which were inventoried due to their size being 19" DBH or greater single-trunk or aggregate. At this juncture, 1 tree has been recommended for removal due to structural defects which may pose a hazard if retained in a developed environment. Please note that this is a detailed, but cursory, look at the trees within the project site. Final impact assessments cannot be definitely determined until development plans have been finalized. At that time, additional impacts and/or removals may be more precisely defined and quantified, and specific recommended mitigative measures can be provided for each impacted tree on site.

Thank you for allowing Sierra Nevada Arborists to assist you with this project. Please feel free to give me a call if you have any questions or require additional information.

Sincerely,

Edwin E. Stirtz  
ISA Certified Arborist WE-0510A

EES:ks

Enclosure

cc: Mr. Mike Williams (w/enclosures: rough-plotted map)

503 Anthony Court ♦ Roseville, CA 95678 ♦ 916-784-7940 ♦ 916-784-1901 Fax

TREE#1	DIAMETER	:	11 inches, 16 inches
Blue Gum	DRIPLINE RADIUS	:	21 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/pasture
	RECOMMENDATIONS	:	Clean out crown
TREE#2	DIAMETER	:	8 inches, 19 inches
Blue Gum	DRIPLINE RADIUS	:	24 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Poor to fair – several large failures, various locations; above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Poor to fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown
TREE#3	DIAMETER	:	12 inches, 16 inches
Blue Gum	DRIPLINE RADIUS	:	27 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/debris piles
	RECOMMENDATIONS	:	Clean out crown

TREE#4	DIAMETER	:	19 inches
Blue Gum	DRIPLINE RADIUS	:	27 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/old appliances
	RECOMMENDATIONS	:	Clean out crown

TREE#5	DIAMETER	:	8 inches, 19 inches
Blue Gum	DRIPLINE RADIUS	:	26 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair -- slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown

TREE#6	DIAMETER	:	10 inches, 11 inches
Blue Gum	DRIPLINE RADIUS	:	17 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown

TREE#7 Blue Gum ( <i>Eucalyptus globulus</i> )	DIAMETER	:	8 inches, 11 inches
	DRIPLINE RADIUS	:	25 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown
TREE#8 Blue Gum ( <i>Eucalyptus globulus</i> )	DIAMETER	:	9 inches, 17 inches
	DRIPLINE RADIUS	:	30 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Poor to fair – old wound, primary crotch oozing sap
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Poor to fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown
TREE#9 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	:	9 inches
	DRIPLINE RADIUS	:	24 feet
	ROOT CROWN	:	Poor to fair – defects/decay, various locations, minor to moderate
	TRUNK	:	Poor to fair – significant lean to south
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Poor structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/stream bed
	RECOMMENDATIONS	:	Consider for removal due to poor structural condition



TREE#10 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	:	5 inches, 6 inches, 6 inches, 7 inches, 7 inches, 9 inches
	DRIPLINE RADIUS	:	16 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/stream bed
	RECOMMENDATIONS	:	Clean out crown
TREE#11 Blue Gum ( <i>Eucalyptus globulus</i> )	DIAMETER	:	23 inches
	DRIPLINE RADIUS	:	24 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
TREE#12 Blue Gum ( <i>Eucalyptus globulus</i> )	DIAMETER	:	9 inches, 14 inches
	DRIPLINE RADIUS	:	26 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Poor to fair – two large failures; above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Poor to fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/pasture
	RECOMMENDATIONS	:	Clean out crown

TREE#13	DIAMETER	:	5 inches, 13 inches, 15 inches
Blue Gum	DRIPLINE RADIUS	:	24 feet
<i>(Eucalyptus globulus)</i>	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/pasture
	RECOMMENDATIONS	:	Clean out crown

TREE#14	DIAMETER	:	10 inches, 22 inches
Blue Gum	DRIPLINE RADIUS	:	28 feet
<i>(Eucalyptus globulus)</i>	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/pasture
	RECOMMENDATIONS	:	Clean out crown

TREE#15	DIAMETER	:	13 inches, 15 inches
Blue Gum	DRIPLINE RADIUS	:	26 feet
<i>(Eucalyptus globulus)</i>	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown

TREE#16 Blue Gum ( <i>Eucalyptus globulus</i> )	DIAMETER	:	11 inches, 11 inches
	DRIPLINE RADIUS	:	26 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown
TREE#17 Blue Gum ( <i>Eucalyptus globulus</i> )	DIAMETER	:	5 inches, 7 inches, 8 inches
	DRIPLINE RADIUS	:	20 feet
	ROOT CROWN	:	Fair – old wound, west side
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/pasture
	RECOMMENDATIONS	:	Clean out crown
TREE#18 Blue Gum ( <i>Eucalyptus globulus</i> )	DIAMETER	:	4 inches, 6 inches, 7 inches, 8 inches, 9 inches
	DRIPLINE RADIUS	:	16 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/pasture
	RECOMMENDATIONS	:	Clean out crown

## **GENERAL PRESERVATION RECOMMENDATIONS**

The following information is provided in an effort to protect those trees which may be impacted by construction within the project site. It should be noted that these recommendations are generic in nature. As plans are developed and refined, a more detailed evaluation of tree impacts and/or removals should be made by a Certified Arborist. At that time specific preservation recommendations may be made for individual trees within the project site.

### **MITIGATIVE OVERVIEW**

In order to afford the greatest potential for tree preservation during construction, there are general guidelines to provide this protection. The critical root zone area for a tree should include the dripline radius measurement taken from the tree trunk to the tip of the farthest reaching branch. In some circumstances, such as with a one-sided tree, this measurement could be somewhat skewed. In these situations, the Project Arborist should determine the critical root zone area. Generally, encroachments should be held to no more than 20% of the critical root zone area where potential root damage could be moderate or significant. In limited situations, encroachment exceeding 20% of the critical root zone area may be possible provided that potential root damage is not severe. The critical root zone area should be fenced prior to any activities on the site.

Canopy impacts can also pose a detriment to preserved trees. Frequently overlooked are conflicts between low-hanging tree branches and necessary clearance beneath a tree for construction equipment or home building purposes. Canopy impacts should also be maintained at 20% or less.

### **PAD GRADING MITIGATIVE MEASURES**

#### **Grade Cuts.**

Cuts within a dripline of a tree should be maintained at less than 20% of the critical root zone area. Grade cuts should be supervised by the Project Arborist and any damaged roots encountered should be root pruned and properly treated as soon as possible after excavation. Cut faces which will be exposed for more than 2-3 days should be covered with dense burlap fabric and watered to maintain soil moisture at least on a daily basis (or possibly more frequently during summer months).

#### **Grade Fills.**

Fill materials less than 1 foot in depth and encroaching less than 20% into the critical root zone area should not require special mitigative measures. Should fills exceed 1 foot in depth up to 20% of the critical root zone area, aeration systems may serve to mitigate the presence of the fill materials.

Should it be necessary to build fill materials on two or three sides of a tree, it is critical to provide for drainage away from the critical root zone area of the tree -- particularly when considering heavy winter rainfalls. Overland releases and subterranean drains dug outside the critical root zone area and tied directly to the main storm drain system are two possible options.

**Structure Encroachment.**

In some cases it may be necessary for a proposed home to encroach into the critical root zone area. Again, this encroachment should be maintained at less than 20%. In this situation, a slab foundation with an aeration system installed beneath the slab and footings excavated by hand may provide adequate root protection. Where tree roots tend to be shallow, even a hand-excavated footing can be detrimental. In this situation, a "post-tension" type slab may minimize root damage. If it is necessary for encroachment to exceed 20%, raised floor construction with a grade-beam type foundation footing may be a viable option.

When evaluating encroachment from a proposed structure the structure height and tree branch conflicts are critical to evaluate in order to ensure that no more than 20% of the tree's canopy requires removal.

### **Specific Inventory Data/Maintenance Recommendations**

Within this specific inventory data you will find the following information:

Tree Number:	Corresponds to aluminum tag attached to the tree.
Species Identification:	Scientific and common species name.
Diameter:	This is the trunk diameter as measured at breast height (industry standard 4.5 feet above ground level).
Dripline radius:	Measurement of the tree's dripline from the trunk to the farthest most branch tip.
Root Crown:	Assessment of the root crown area located at the base of the trunk of the tree at soil level.
Trunk:	Assessment of the tree's main trunk from ground level generally to the point of the primary crotch structure.
Limbs:	Assessment of both smaller and larger branching, generally from primary crotch structure to branch tips.
Foliage:	Tree's leaves.
Overall Condition:	Describes overall condition of the tree in terms of structure and vigor.
Dripline Environment:	Describes area directly beneath the tree (growing environment).
Recommendation:	Specific maintenance requirements.

**CROWN CLEAN OUT:** This shall consist of the removal of all dead, dying, diseased, interfering, objectionable, obstructing, and weak branches, as well as selective thinning to lessen wind resistance.

**DEEP ROOT FERTILIZATION (D.R.F.):** A method employed to induce vigor and stimulate new root growth. This is used as a means of feeding a large tree, as well as deep watering at the same time. Water soluble fertilizers are mixed in water and hydraulically pumped with a probe into the ground, delivering water and nutrients directly to the root zone, allowing for uptake from the tree. In this way, vigor can be improved and new root growth stimulated.

### DEFINITIONS OF TERMS USED IN THIS REPORT

**GOOD** - A tree in this category has no trunk or root crown cavities or injuries; there is no indication of hollowness; no foreign objects are embedded in its structure; the root crown is above grade; there is no decay present except for small stubs; the structure is strong; the trunk is tapers; the bark thickness is normal; there is no fluxing; no fungus is evident; there is a below average amount of dead limbs and twigs present which is normal for the size and age of the species; there is no co-dominant branching present; there are no large callused areas and any small callusing present is vigorous and intact; there are no abnormally heavy insect infestations; the growth rate is and has been average or above; limb weight is not excessive; buds are normal size and viable; the leaf size, color, and density is normal or better; and barring any unforeseen negative effects, the life expectancy should exceed thirty years.

**FAIR** - There is no decay or indications of large hollow areas in the large limbs, root crown, or trunk; a few small callused-over foreign objects, e.g., nails, may be present, the structure is strong; no fungus is evident other than small saprophytes on exposed wood; some small, callusing injuries may be present, some small limbs may be dead and decaying but callus is forming at their base; some excessive limb weight may exist; there may be some minor fluxing; the amount of dead limbs and twigs present is within the normal range; some large callused areas may be present; some small cavities and areas of decay may be present; the growth rate is average or slightly below average; and some leaf size, color, and density may vary.

**POOR** - Significant cavities, dead areas, and decay may be present; the tree is actually defective; fungus fruiting bodies may be present; the amount of dead limbs and twigs is far above normal; major co-dominant branching with embedded bark may be present; buds are small and some may not be viable; leaves may be below average size and may be abnormal in color; significant pest damage may be present; and the predicted structural life and/or viability is less than ten years.

The ratings "good to fair" and "fair to poor" are used to describe trees that fall between the described major categories and have elements of both.

# LOT A

OPEN SPACE  
27.2 Acres

SMUD  
EASEMENT

43	44	45	46	47	48	49	50	51	52	53	54
12,016.84	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00	12,727.15

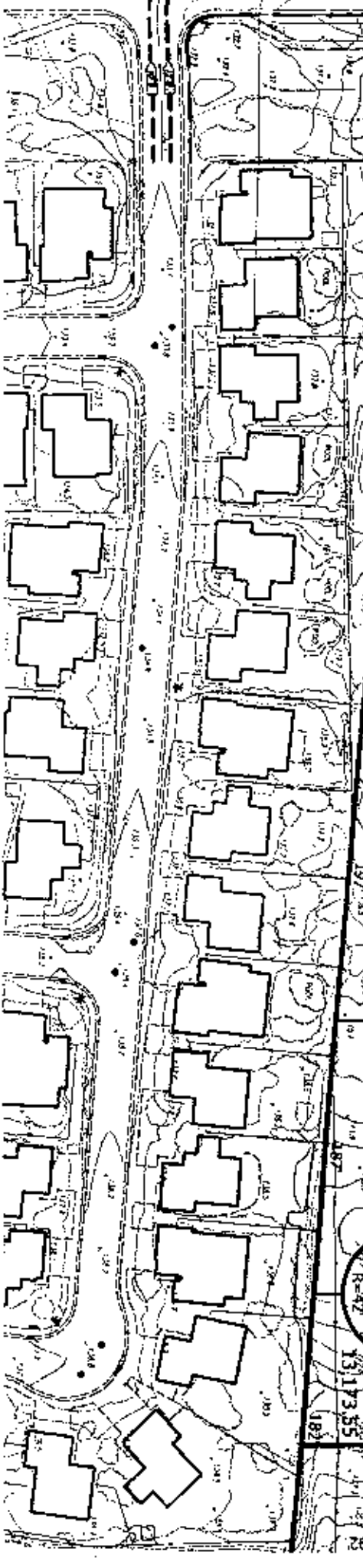
BIKE PATH

SM-2

39	40	41	42	35	36	37	38	31	32	33	34
12,164.16	12,075.00	12,144.90	18,538.61	12,597.33	12,270.58	12,045.00	12,619.16	12,839.01	12,454.16	12,955.42	13,173.55

LOT E  
2.20 Acres

SPRUILLEN  
EVALUATION  
DEF WOOD





Insert color separator  
sheet here!





# SIERRA NEVADA ARBORISTS

**TOWNE DEVELOPMENT OF SACRAMENTO, INC.**

**WHISPER CREEK, UNIT #1: PFE 14 (Almond Ranch) PROPERTY  
(Placer County, California)**

**PRELIMINARY ARBORIST REPORT  
AND INVENTORY SUMMARY**

Submitted by:

Edwin E. Stirtz, Principal Consulting Arborist  
ISA Certified Arborist WE-0510A  
SIERRA NEVADA ARBORISTS

Wayne R. McKee, Consulting Arborist  
ISA Certified Arborist WE-0959A  
SIERRA NEVADA ARBORISTS

August 7, 2003



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This consultant's report, dated August 7, 2003, is for the exclusive and confidential use of Towne Development of Sacramento, Inc. concerning the Whisper Creek Unit #1: PFE 14 (Almond Ranch) Property project site located in Placer County, California exclusively, and may not be reproduced in whole or in part on other occasions without written permission of the Consultants, Sierra Nevada Arborists.







# SIERRA NEVADA ARBORISTS

August 7, 2003

Mr. Jack Coulter  
Towne Development of Sacramento, Inc.  
775 Sunrise Avenue, Suite 270  
Roseville, California 95661

RE: Arborist Report for the Whisper Creek Unit #1: PFE 14 (Almond Ranch)  
Placer County, California

Dear Mr. Coulter:

On August 7, 2003, Sierra Nevada Arborists visited the Whisper Creek Unit #1: PFE 14 (Almond Ranch) project site located off PFE Road in Placer County, California. The purpose of this site visit was to inspect and evaluate the native trees located within the project site, and to prepare an Arborist Report following the Placer County Tree Preservation Ordinance (Article 12.16, Chapter 12.16.020) which requires an inventory and field identification of any single-trunked native trees 6" DBH or larger, as well as any multi-trunked native trees with an aggregate of 10" DBH or larger. The trees have been identified in the field with a round metal numbering tag which has been affixed to the tree's trunk. For your reference, the numbers utilized in this report correspond to the tree tag affixed to the tree, and those tree numbers have been rough-plotted on the map provided by Baker-Williams Engineering Group.

As you will see, 22 native trees were found on site comprised of five (5) Blue Oak (*Quercus douglasii*), sixteen (16) Pacific Willow (*Salix lasiandra*) and one (1) Cottonwood (*Populus fremontii*). This report also includes data for four (4) non-native Blue Gum Eucalyptus (*Eucalyptus globulus*) trees which were inventoried due to their size being 19" DBH or greater single-trunk or aggregate. At this juncture, one (1) tree has been recommended for removal due to structural defects which may pose a hazard if retained in a developed environment. Please note that this is a detailed, but cursory, look at the trees within the project site. Final impact assessments cannot be definitely determined until development plans have been finalized. At that time, additional impacts and/or removals may be more precisely defined and quantified, and specific recommended mitigative measures can be provided for each impacted tree on site. In the meantime, we have provided some General Preservation Recommendations which should be utilized as a guideline for the protection of the trees to be preserved within the development area.

Thank you for allowing Sierra Nevada Arborists to assist you with this project. Please feel free to give me a call if you have any questions or require additional information.

Sincerely,

Edwin E. Stirtz  
ISA Certified Arborist WE-0510A

TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
RE: Whisper Creek Unit #1: PFE 14 (Almond Ranch)  
August 7, 2003  
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TREE#1 [aka #295]	DIAMETER	:	24 inches @ 3' above grade
Blue Oak	DRIPLINE RADIUS	:	24 feet
( <i>Quercus douglasii</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – pruned for utility line clearance
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/roadside cut 6' north of trunk/road shoulder/asphalt
	RECOMMENDATIONS	:	Clean out crown
TREE#2 [aka #294]	DIAMETER	:	16 inches
Blue Oak	DRIPLINE RADIUS	:	21 feet
( <i>Quercus douglasii</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair – embedded barbed wire
	LIMBS	:	Fair – minor pruning for utility line clearance
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/road shoulder/asphalt
	RECOMMENDATIONS	:	Clean out crown
TREE#3 [aka #293]	DIAMETER	:	18 inches
Blue Oak	DRIPLINE RADIUS	:	22 feet
( <i>Quercus douglasii</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – minor pruning for utility line clearance; above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/road shoulder/asphalt
	RECOMMENDATIONS	:	Clean out crown

TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
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TREE#4	DIAMETER	:	7 inches, 8 inches
Pacific Willow	DRIPLINE RADIUS	:	17 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown
TREE#5	DIAMETER	:	17 inches @ 3' above grade
Pacific Willow	DRIPLINE RADIUS	:	20 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair -- slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown
TREE#6	DIAMETER	:	4 inches, 7 inches, 8 inches
Pacific Willow	DRIPLINE RADIUS	:	14 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown

TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
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TREE#7	DIAMETER	:	6 inches
Pacific Willow	DRIPLINE RADIUS	:	10 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair - slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown

TREE#8	DIAMETER	:	4 inches, 6 inches, 7 inches, 8 inches, 9 inches
Pacific Willow	DRIPLINE RADIUS	:	17 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair - slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown

TREE#9	DIAMETER	:	2 inches, 4 inches, 4 inches, 5 inches
Pacific Willow	DRIPLINE RADIUS	:	12 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair - slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown

TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
 RE: Whisper Creek Unit #1: PFE 14 (Almond Ranch)  
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TREE#10 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	:	3 inches, 3 inches, 3 inches, 4 inches, 5 inches
	DRIPLINE RADIUS	:	13 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair -- slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown
TREE#11 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	:	8 inches, 11 inches, 15 inches
	DRIPLINE RADIUS	:	22 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair -- slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Riparian plants/drainage
	RECOMMENDATIONS	:	Clean out crown
TREE#12 Pacific Willow ( <i>Salix lasiandra</i> )	DIAMETER	:	2 inches, 2 inches, 7 inches, 7 inches, 8 inches, 9 inches
	DRIPLINE RADIUS	:	17 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair -- slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Riparian plants/drainage
	RECOMMENDATIONS	:	Clean out crown

TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
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TREE#13	DIAMETER	:	5 inches, 11 inches
Pacific Willow	DRIPLINE RADIUS	:	18 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Riparian plants/drainage
	RECOMMENDATIONS	:	Clean out crown

TREE#14	DIAMETER	:	4 inches, 4 inches, 5 inches, 5 inches, 6 inches, 7 inches, 8 inches
Pacific Willow	DRIPLINE RADIUS	:	22 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Riparian plants/drainage
	RECOMMENDATIONS	:	Clean out crown

TREE#15	DIAMETER	:	6 inches, 7 inches, 8 inches, 10 inches
Pacific Willow	DRIPLINE RADIUS	:	21 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown

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TREE#16	DIAMETER	:	4 inches, 4 inches, 6 inches
Pacific Willow	DRIPLINE RADIUS	:	26 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Poor – partial failure
	TRUNK	:	Poor – leans west, nearly horizontal to grade due to past failure
	LIMBS	:	Fair
	FOLIAGE	:	Fair
	CONDITION	:	Poor structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Remove
 TREE#17	 DIAMETER	 :	 8 inches
Fremont Cottonwood	DRIPLINE RADIUS	:	16 feet
( <i>Populus fremontii</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown
 TREE#18	 DIAMETER	 :	 8 inches, 8 inches, 9 inches
Pacific Willow	DRIPLINE RADIUS	:	17 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/asphalt
	RECOMMENDATIONS	:	Clean out crown

TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
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TREE#19	DIAMETER	:	6 inches, 6 inches, 9 inches,
Pacific Willow			10 inches
( <i>Salix lasiandra</i> )	DRIPLINE RADIUS	:	16 feet
	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown
 TREE#20	 DIAMETER	 :	 12 inches, 25 inches
Blue Gum Eucalyptus	DRIPLINE RADIUS	:	30 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Poor to fair – old callousing wound, north side 3'-14' above grade with minor to moderate decay
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Poor to fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown; inspect annually
 TREE#21	 DIAMETER	 :	 12 inches
Pacific Willow	DRIPLINE RADIUS	:	16 feet
( <i>Salix lasiandra</i> )	ROOT CROWN	:	Poor to fair – minor defects/decay, north side
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Poor to fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/drainage
	RECOMMENDATIONS	:	Clean out crown



TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
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TREE#22	DIAMETER	:	19 inches
Blue Gum Eucalyptus	DRIPLINE RADIUS	:	22 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses
	RECOMMENDATIONS	:	Clean out crown
TREE#23	DIAMETER	:	19 inches
Blue Gum Eucalyptus	DRIPLINE RADIUS	:	27 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair – old callousing wound, north side
	TRUNK	:	Fair
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/gravel drive
	RECOMMENDATIONS	:	Clean out crown
TREE#24	DIAMETER	:	20 inches
Blue Gum Eucalyptus	DRIPLINE RADIUS	:	20 feet
( <i>Eucalyptus globulus</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Poor to fair – forks at 5' above grade; embedded bark
	LIMBS	:	Fair – slightly above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Poor to fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/gravel drive
	RECOMMENDATIONS	:	Clean out crown; install single direct-pick cable to help support primary crotch

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TREE#25	DIAMETER	:	25 inches
Blue Oak	DRIPLINE RADIUS	:	35 feet
( <i>Quercus douglasii</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair – embedded barbed wired
	LIMBS	:	Fair – above average amount of deadwood; one-sided north and west
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/gravel drive
	RECOMMENDATIONS	:	Clean out crown
TREE#26	DIAMETER	:	23 inches
Blue Oak	DRIPLINE RADIUS	:	31 feet
( <i>Quercus douglasii</i> )	ROOT CROWN	:	Fair
	TRUNK	:	Fair – embedded barbed wire
	LIMBS	:	Fair – above average amount of deadwood
	FOLIAGE	:	Fair
	CONDITION	:	Fair structure and fair vigor
	DRIPLINE ENVIRONMENT	:	Grasses/gravel drive
	RECOMMENDATIONS	:	Clean out crown

TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
Whisper Creek Unit #1: PFE-14 (Almond Ranch)  
TREE INVENTORY SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	12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### **GENERAL PRESERVATION RECOMMENDATIONS**

The following information is provided in an effort to protect those trees which may be impacted by construction within the project site. It should be noted that these recommendations are generic in nature. As plans are developed and refined, a more detailed evaluation of tree impacts and/or removals should be made by a Certified Arborist. At that time specific preservation recommendations may be made for individual trees within the project site.

### **MITIGATIVE OVERVIEW**

In order to afford the greatest potential for tree preservation during construction, there are general guidelines to provide this protection. The critical root zone area for a tree should include the dripline radius measurement taken from the tree trunk to the tip of the farthest reaching branch. In some circumstances, such as with a one-sided tree, this measurement could be somewhat skewed. In these situations, the Project Arborist should determine the critical root zone area. Generally, encroachments should be held to no more than 20% of the critical root zone area where potential root damage could be moderate or significant. In limited situations, encroachment exceeding 20% of the critical root zone area may be possible provided that potential root damage is not severe. The critical root zone area should be fenced prior to any activities on the site.

Canopy impacts can also pose a detriment to preserved trees. Frequently overlooked are conflicts between low-hanging tree branches and necessary clearance beneath a tree for construction equipment or home building purposes. Canopy impacts should also be maintained at 20% or less.

### **PAD GRADING MITIGATIVE MEASURES**

#### **Grade Cuts.**

Cuts within a dripline of a tree should be maintained at less than 20% of the critical root zone area. Grade cuts should be supervised by the Project Arborist and any damaged roots encountered should be root pruned and properly treated as soon as possible after excavation. Cut faces which will be exposed for more than 2-3 days should be covered with dense burlap fabric and watered to maintain soil moisture at least on a daily basis (or possibly more frequently during summer months).

#### **Grade Fills.**

Fill materials less than 1 foot in depth and encroaching less than 20% into the critical root zone area should not require special mitigative measures. Should fills exceed 1 foot in depth up to 20% of the critical root zone area, aeration systems may serve to mitigate the presence of the fill materials.

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Should it be necessary to build fill materials on two or three sides of a tree, it is critical to provide for drainage away from the critical root zone area of the tree -- particularly when considering heavy winter rainfalls. Overland releases and subterranean drains dug outside the critical root zone area and tied directly to the main storm drain system are two possible options.

#### **Structure Encroachment.**

In some cases it may be necessary for a proposed home to encroach into the critical root zone area. Again, this encroachment should be maintained at less than 20%. In this situation, a slab foundation with an aeration system installed beneath the slab and footings excavated by hand may provide adequate root protection. Where tree roots tend to be shallow, even a hand-excavated footing can be detrimental. In this situation, a "post-tension" type slab may minimize root damage. If it is necessary for encroachment to exceed 20%, raised floor construction with a grade-beam type foundation footing may be a viable option.

When evaluating encroachment from a proposed structure the structure height and tree branch conflicts are critical to evaluate in order to ensure that no more than 20% of the tree's canopy requires removal.

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### **Specific Inventory Data/Maintenance Recommendations**

Within this specific inventory data you will find the following information:

Tree Number:	Corresponds to aluminum tag attached to the tree.
Species Identification:	Scientific and common species name.
Diameter:	This is the trunk diameter as measured at breast height (industry standard 4.5 feet above ground level).
Dripline radius:	Measurement of the tree's dripline from the trunk to the farthest most branch tip.
Root Crown:	Assessment of the root crown area located at the base of the trunk of the tree at soil level.
Trunk:	Assessment of the tree's main trunk from ground level generally to the point of the primary crotch structure.
Limbs:	Assessment of both smaller and larger branching, generally from primary crotch structure to branch tips.
Foliage:	Tree's leaves.
Overall Condition:	Describes overall condition of the tree in terms of structure and vigor.
Dripline Environment:	Describes area directly beneath the tree (growing environment).
Recommendation:	Specific maintenance requirements.

**CROWN CLEAN OUT:** This shall consist of the removal of all dead, dying, diseased, interfering, objectionable, obstructing, and weak branches, as well as selective thinning to lessen wind resistance.

**DEEP ROOT FERTILIZATION (D.R.F.):** A method employed to induce vigor and stimulate new root growth. This is used as a means of feeding a large tree, as well as deep watering at the same time. Water soluble fertilizers are mixed in water and hydraulically pumped with a probe into the ground, delivering water and nutrients directly to the root zone, allowing for uptake from the tree. In this way, vigor can be improved and new root growth stimulated.

*Prepared by Sierra Nevada Arborists for Towne Development of Sacramento, Inc.*

TOWNE DEVELOPMENT OF SACRAMENTO, INC.  
RE: Whisper Creek Unit #1: PFE 14 (Almond Ranch)  
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#### DEFINITIONS OF TERMS USED IN THIS REPORT

**GOOD** - A tree in this category has no trunk or root crown cavities or injuries; there is no indication of hollowness; no foreign objects are embedded in its structure; the root crown is above grade; there is no decay present except for small stubs; the structure is strong; the trunk is tapers; the bark thickness is normal; there is no fluxing; no fungus is evident; there is a below average amount of dead limbs and twigs present which is normal for the size and age of the species; there is no co-dominant branching present; there are no large callused areas and any small callusing present is vigorous and intact; there are no abnormally heavy insect infestations; the growth rate is and has been average or above; limb weight is not excessive; buds are normal size and viable; the leaf size, color, and density is normal or better; and barring any unforeseen negative effects, the life expectancy should exceed thirty years.

**FAIR** - There is no decay or indications of large hollow areas in the large limbs, root crown, or trunk; a few small callused-over foreign objects, e.g., nails, may be present, the structure is strong; no fungus is evident other than small saprophytes on exposed wood; some small, callusing injuries may be present, some small limbs may be dead and decaying but callus is forming at their base; some excessive limb weight may exist; there may be some minor fluxing; the amount of dead limbs and twigs present is within the normal range; some large callused areas may be present; some small cavities and areas of decay may be present; the growth rate is average or slightly below average; and some leaf size, color, and density may vary.

**POOR** - Significant cavities, dead areas, and decay may be present; the tree is actually defective; fungus fruiting bodies may be present; the amount of dead limbs and twigs is far above normal; major co-dominant branching with embedded bark may be present; buds are small and some may not be viable; leaves may be below average size and may be abnormal in color; significant pest damage may be present; and the predicted structural life and/or viability is less than ten years.

The ratings "good to fair" and "fair to poor" are used to describe trees that fall between the described major categories and have elements of both.

